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ORIGINAL LECTURES.

THE GROWTH OF A PROFESSION.

An Address, delivered at the Eighteenth Annual Meeting of the Canada Medical Association, held at Chatham, Ontario, September 2 and 3, 1885.

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GENTLEMEN: When I removed last year to another part of the great field in which, without distinction of race or country, we are all laborers, it seemed good to you, fellow-workers, in the kindness of your hearts, to nominate me President of the Association. If in the tumult of thoughts which come tumbling unbidden into a man's mind, the idea of such an honor ever came, truly it was as a speck in the horizon of my ambition towards which, as years rolled on, I might travel; but it has been ordered otherwise, and as exceptional circumstances have placed me in an exceptional position, I can but crave your indulgence in the exercise of an office for which I feel that I lack certain important qualifications.

Let me, in the first place, give expression to the general regret that the Association has not been able to carry out its programme and meet in Winnipeg as had been arranged, but with Mars in the ascendant, and Big Bear and Poundmaker on the warpath, our brethren of the prairie city thought it would be better—perhaps safer—to postpone the meeting in the Northwest unto a more convenient season, when grim-visaged war shall have smoothed its wrinkled front. But, again, let me express the satisfaction we feel at being able to meet here in Chatham among men we know so well, who have been so faithful to the Association, and in a section of the country in which the profession possesses so many able and industrious members.

In seeking for a theme upon which to address you, I felt that if we met in Winnipeg, some subject connected with growth and development would alone be in keeping with the remarkable progress which the Northwest and its capital have made during the past decade. I thought that by tracing the lines along which the profession in a new country should advance, the meeting might perhaps help the movement and give a stimulus to thought and action, which is often one of the best effects of gatherings of this kind. When circumstances necessitated a change in the place of meeting, it seemed as if my subject, upon which I had spent some thought, should also be changed; but, on reflection, it was evident that the conditions in the older provinces were only an advanced stage of those existing in Winnepeg and Manitoba—progress should be our watchword here as there, growth and development the essential features of our professional life, and upon these topics I could as well address you in Ontario as in the Northwest. I want then to tell you, in as few words as possible, just how far on we have got and what have been the methods of our progress. In some parts of the Dominion we may study the profession in its simplest form; in the Northwest Territories, for example, it has not advanced beyond the amœba stage. The doctors there are so many unicellular creatures—masses of undifferentiated professional protoplasm, without organization or special functional activities. They cannot even exercise the rhizopodal mode of multiplication, but increase by the low inorganic method of accretion. In the older Provinces, on the other hand, the professional units have combined for the general good into a sort of polypidom—the organized profession—a great advance on the amœba stage; there are special organs of reproduction known as the medical schools, and there are signs of a nervous system—medical societies.

The three aspects then in the growth and development of the profession to which I wish to direct your attention, are (1) the organized profession; (2) the medical school; and (3) the medical society:

1. The organized profession. In a well-arranged community a citizen should feel that he can at any time command the services of a man who has received a fair training in the science and art of medicine, into whose hands he may commit with safety the lives of those near and dear to him. For the State to regulate and determine the individuals to whom the citizen may apply, is not by most persons thought unreasonable. There are those, however, who would have no restrictions, but allow the utmost freedom and permit assumption and assurance to have full sway, and give to any man without special education the right to practise medicine. This has never been the case in Canada. The men who came here in the early days to practise medicine were chiefly English and Scotch licentiates, who brought with them the traditions and customs of the profession in Great Britain. Very many of them were army surgeons, accustomed by long training to system and discipline. Without medical schools, the only recourse for a young man wishing to enter the profession was either to cross the ocean or to serve an apprenticeship with and receive instruction from a practitioner. Boards for the inspection of diplomas of men coming from outside the country and for the examination of the young men who had passed the necessary time with local preceptors, were organized in the old Province of Quebec in 1788, and in Upper Canada in 1815—dates ever to be memorable in the history of medicine in this country.

It is a common experience that men do not always appreciate their blessings and advantages. Those who are the best off are the least sensible of it. I have often thought this of the profession in Canada in relation to the Medical Boards, when I have heard murmurs of discontent. As they constitute a special feature in the Canadian medical system, you will allow me to refer to their origin and functions at some length. Primarily, the Medical Board is simply a Bureau of Registration

appointed by the State, as, in fact, the British Medical Council is to-day; but here, at an early period, before the establishment of schools and universities, it was an examining body as well, and granted permits to practise. As universities sprang up, the latter part of the duties of the Medical Board was in part abrogated, and the functions more or less limited to the registration of degrees. An exceedingly important change was effected when the boards became elective bodies, truly representative of the profession. In Ontario, this was brought about by the Act of 1866, and in Quebec, by the Act of 1847. In this province the mode of selection of members is truly democratic, the profession in each electorial district selecting their candidate. In the province of Quebec a more cumbrous and less distinctly popular mode is followed, whereby each constituent of a district votes not only for his own, but for the candidates in all other districts. As proxies are allowed, the entire election may be in the hands of any clique collecting the largest number, but this method is doomed, and the more popular one will shortly be introduced.

The struggle has all along been between the universities and the profession, as represented by the Medical Boards. The former have always maintained the right of their alumni to license without further examination—a privilege still granted in the Province of Quebec. But the universities chartered by the crown in past days did more, they opposed bitterly the incorporation of independent medical schools, as witness the hostility to the Montreal School of Medicine by the McGill University, and to the Toronto School of Medicine by the University of Toronto. Much of this opposition was based on the highest motives. The opponents were afraid that if numerous independent schools arose, each with licensing power, and the license recognized by the Provincial Boards, that free trade in diplomas would result, the standard be lowered, and the profession, as a profession, ruined.

As at present constituted, the Medical Boards are entrusted by law with full power to regulate medical education in the provinces, to say what preliminary branches shall be required, of what the curriculum shall consist, and to make such changes as from time to time may seem advisable. When we consider the conditions under which we live, these enactments are in the highest degree advantageous. There are in the Dominion eleven medical schools, many of which are corporations without any control, with faculties irresponsible as regards supervision by trustees, censors, or governors. Even of those which form actual parts of universities, the faculties are partly or altogether independent, and there have been several instances in which, for greater freedom, the benefits of university connections have been sacrificed. The inevitable result of such a state of affairs is keen competition. The students are few, the schools are many; expenses are heavy, receipts are light; human nature is frail—what will follow you know—restrictions are relaxed, special inducements are offered, gradually the standard is lowered, the meshes are widened, examinations become a farce, and the schools degenerate into diploma mills, in which the highest interests of the profession and the safety of the public are prostituted to the cupidity of the owners. The depths to which unlicensed competition will sink the proprietors of some institutions, pass the comprehension of a right-minded person. They will compass heaven and earth to gain students, resorting to measures of solicitation and inducements, various tricks, and artifices which would be deemed doubtful in a grave-yard insurance company. Finally, upon the proprietors of such schools comes a sort of moral paralysis, such a condition as divines call the hardened heart; when, incapable of seeing, much less doing, the right, they believe the system in which they work is a true and good one, and attempts at reformation become well-nigh hopeless. The picture is not overdrawn. Unrestricted competition between numerous schools means free trade in diplomas, and free trade in this sense is synonymous with manslaughter.

From this disastrous condition the medical boards have saved Canadian schools. Bitterly did the colleges fight against increasing the powers of the boards; jealous in the extreme of their chartered rights; and too often eager in obstructing, instead of furthering, useful legislation, they have found, though they did not know it, victory in defeat. The principle is sound and well founded; the united profession of a country or a province should be the guardian of its own honor; greater than the schools, which are but a part of it. The control of all matters relating to medical education and practice may safely be entrusted to its care.

The incorporated body of the profession in each province of Canada is variously known as the "College of Physicians and Surgeons," the "Medical Council," or the "Medical Board," and, as you are all well aware, by the Act of Confederation, each province is left to regulate its own educational affairs. Within the past ten or twelve years, so many important changes have been effected, particularly in the older provinces of Ontario and Quebec, that the boards are gradually approaching a state of efficiency.

As regards education, the ideal board should perform the following duties: 1st. Test the fitness of young men to enter upon the study of medicine; 2d. Order the curriculum in a manner best suited to the country and the requirements of modern medicine; and, 3d. Control absolutely the examinations for the license to practise. Upon each of these points I propose to make a few remarks, referring particularly to existing conditions:

1. Preliminary education and matriculation. In most of the provinces a thoroughly satisfactory system prevails, and a young man, before entering upon the study of medicine, must give evidence that his general education is of such a nature as will enable him to pursue intelligently the study of a learned profession. If the examination is satisfactory, he is permitted to register, and his studies date from this period. A board should control its own matriculation examination, and should accept no other. It is directly responsible to the profession that no incompetent person shall be admitted to study. The check comes lighter to a young man, and is more easily borne at this time than later in his career. The examiners should be independent persons, engaged in general teaching, and there should be at least three or four. No one man can conduct a preliminary examination with entire satisfaction. The organization of the board of matriculation examiners in Quebec should

serve as a model for all the other provinces. It was a decidedly retrograde step when the medical council of this province relegated the entrance examination to other hands. And the acceptance of the intermediate High School certificate is not without its disadvantages. We want increasing watchfulness in this matter, and in the interests of higher education the boards should receive the cordial support of all the medical schools in their endeavors to effect an honest and satisfactory standard. That there has been laxity in the past, any one who has had to read many papers at examinations knows only too well. Throughout Canada the subjects for matriculation have always closely followed those recommended by the British Medical Council, and embrace the elements of a good general education, with a fair amount of Latin. To these special subjects have lately been added Natural Philosophy, Chemistry, and Botany (optional). The student has had in the past several difficulties to contend with which should be removed. He has had to pass in some cases two examinations: one before the board of his province, and the other before the university at which he wishes to take his degree. Now the matriculation examination of the boards should be placed on such a level, and conducted in such a way, that any university could consistently accept it in lieu of its own, and if it was universally recognized by the profession, by teachers of high schools, and by the candidates, that there was but one portal of admission to the study of medicine, and that through the medical board by means of its authorized examiners, a great deal of trouble and annoyance would be prevented. Again, in the interests of the student, the greatest care should be exercised in the selection by the examiners of subjects which the candidates will find taught in the advanced classes of the high schools. Similar books to those read for other matriculations should as far as possible be chosen. Lack of attention to these apparently petty details has caused no little irritation on the part of students and teachers.

Let me, then, urge upon you the importance of doing all in your power to put the preliminary education of the student on a good basis; it is in your own hands—insist on competent independent boards, responsible to your chosen representatives; and, what is equally important, impress upon your students and the young men who seek your advice, the need of careful preparation. As a result of some years of observation, I should say that the general practitioners throughout the country are not quite alive to their duty in this matter. Too often young men go up for their examinations imperfectly prepared, and just slip through, to flounder on, hampered at every turn by defective preliminary training.

2. The regulation of the curriculum. The general profession, through its delegates, has an incontrovertible right to regulate and frame the curriculum of study which men shall follow who aspire to join its ranks. The governments allow this right, and have empowered the Boards to frame such measures as they see fit. In the exercise of this function there has been a little friction in the past, and in no one of their duties will the Boards of the various provinces require to proceed with greater circumspection in the future. That there has been a good deal of tinkering, and not always of a satisfactory kind, is a complaint frequently made by schoolmen. That there has been very little and that the results have not been bad, will, I think, be the verdict of any one who looks into the matter fully. The curriculum is at present in a transition stage, and we must expect in the next few years to see important changes, but into these I do not propose to go in detail. One thing is clear, that the Boards and the teaching bodies must act in concert—in the interest of the student and of the profession harmonious action must be arranged. In this country the students of all classes seek the degree as well as the license and are not, as the majority are in Great Britain, satisfied with the latter. Hence the imperative need of a certain uniformity in the requirements of the boards of the universities. The teachers cannot possibly arrange the instruction on diverse plans. The duty of the Board is to lay down a minimum curriculum to which every student shall conform, and which the schools can easily carry out. The university requirements, while as much higher as the authorities chose to exact, should be laid down in the same lines, so that a student could easily proceed in his studies for the one or the other without inconvenience, and the teachers prepare a man for either examination without needless repetitions.

Fortunately the universities and teaching bodies are well represented—too well in Ontario in proportion to the territorial representatives—on the boards, and the introduction and regulation of the necessary changes in the curriculum will fall chiefly into the hands of their delegates, but there are many details which require careful attention on the part of all. The members of the educational committees of the boards have their work laid out for the next few years. Among important questions which await settlement in some of the Provinces are the strict enforcement of the four years of study and the advisability of prolonging the session to nine months, or, what amounts to the same thing, making the summer session compulsory. The plan of allowing a student to pass one of his four years of study with a physician should be done away with at as early a date as possible. For two reasons: in the first place, it is, in a majority of instances, a farce, and we find on inquiry that the student has been pursuing his usual avocation, and perhaps going to a doctor's office in the evening: it is certainly not the equivalent of a session at college. If allowed at all, it should not be the first year, but the third, as permitted in the Province of Quebec, for then a student is in a position to obtain really valuable instruction in practical medicine and surgery from his preceptor. I was surprised, a few years ago, on obtaining the statistics from the registrar of one of the boards, to find how many men there were who passed on the three sessions. In this matter, the boards should not be behind the leading universities, which no longer recognize the year with a physician as the equivalent of a session. And, in the second place, the change should be made in the interests of the schools themselves. On no possible scheme can you arrange a satisfactory three-session course. Either a man pays too much attention to his primary subjects in the first two sessions and leaves the important final branches for one short session, or he tries in his second session to work hard at both and ends in a muddle-pated condition which unfits him for either. The prolongation of the session to nine months, as now exists in some of the schools in the Province of Quebec, must ultimately come

in all the colleges. How the foolish habit arose of giving six months' vacation we need not stop to inquire—the folly of it is too evident to need remark; and we can safely predict that within ten years the nine months' course will be universal, either as a continuous session, as at Laval University, or by making the now optional summer session compulsory.

3. The control of the licensing power is the most important function of the medical boards. Acting on behalf of the State, it is their duty to see that all candidates for the license are properly qualified. They stand as the guardians of the public and of the profession, and here their responsibilities are indeed great. In the ideal condition, there should be but one portal in each country through which a man can enter the profession and legally exercise its rights—a uniform standard of qualification to which each one must conform. This is secured in some countries by the direct action of the State, which appoints examiners for the purpose. But a better system is that which we have here reached, in which the State entrusts the incorporated profession with the duty. On this question the hottest battles of the profession have been and are being fought. The universities and chartered colleges have contested, inch by inch, the rights of the profession in this matter, and the struggle has not everywhere concluded. The possession of a degree in medicine from a university, no matter how reputable, cannot on any reasonable ground carry with it the right to registration and practise. The schools are independent bodies, outside, in a large measure, of State, and altogether of professional, control; they are numerous, and the competition between them is close; the requirements for graduation are variable, and the standard of examination unequal. They are close corporations, and neither the public nor the profession ever know what transpires in their councils. In the majority the teachers are also the examiners. Such a state of things can only lead to relaxation, and is fraught with danger to the best interests of all concerned.

A uniform system has not yet been adopted in all the provinces. In too many the possession of a degree, obtained after a proper course of study, still entitles the holder to the license, all others having to submit to examination. In the Province of Ontario the most advanced position has been reached, and the one road to registration is through the examination conducted by a board appointed by the medical council. To this the other provinces must ultimately come. It is what the profession in Great Britain has been striving after for years, and so far striving in vain against the power of corporations and vested interests. In the Province of Quebec the medical board accepts degrees from the local universities to which it sends assessors—after the manner of the British Medical Council, who report on the nature of the examinations. Others than the holders of such degrees must submit to examination. Although this method has not worked badly, it is but a makeshift, and must finally be replaced by a central board of examiners, who shall test the qualifications of all candidates. Unfortunately the prevalent conditions of that province are such that dual boards will be needed, one for the French and one for the English.

In carrying out the details of a central examining board, there are inevitable difficulties which at first cause worry and discontent, but, with patience and mutual forbearance, gradually vanish. The choice of suitable examiners is a delicate matter, and one on which the schoolmen are apt to air grievances more or less just. They certainly should not be selected at random from the members of the council. A few years ago a friend of mine was nominated examiner in chemistry at the Quebec Board. He was a remarkably able practitioner, with a very indistinct and hazy knowledge of chemistry, and it was hard to say who was most uneasy at the examination, Dr. ——— or the students. Teachers in the schools have good grounds for complaint when the Boards select as examiner on special subjects—such as anatomy, chemistry, physiology, and pathology—men who have been for years in active practice without any possibility of keeping their own knowledge on these subjects fresh and practical, and who to "brusk up" require to work as hard, may be, as the poor candidates. With the more practical branches these difficulties do not exist, and the Councils have a wide field for selection. Where special technical knowledge is needed, it would be preferable even to override the law which forbids the selection by the Boards of any teacher as an examiner on his own subject. For the "Staats Examen," in Germany, the professors in different departments are usually chosen by the government to conduct the examination in their special branches. The point is one to which the Boards should attend carefully in the future. They lose the respect of the profession and of the students in nominating as examiners men without special qualifications in certain fields.

The examinations for the license should be made in all respects as practical as possible, but to do this a Provincial Board must possess its own building and appliances, and make arrangements with hospital authorities to have free access to a sufficient number of patients. As the work is done primarily in the interests of the public, it is clearly the duty of the Legislatures to assist in making suitable provision, and it seems probable that Ontario, the first to set the example of a one-portal licensing system, will also be the first to have a local habitation worthy of her incorporated profession. Such a building should contain the paraphernalia necessary for examination purposes. The division into a primary and a final examination, as at present made in most of our universities, and at the Ontario Medical Council, seems the best arrangement. The former embracing anatomy, physiology, general and medical chemistry, and materia medica; the latter, the practical branches of medicine, surgery, and midwifery. In practical details the "Staats-Examen," of Germany, might in many particulars be followed.

A serious difficulty has been felt in conducting the examinations satisfactorily as regards time, place, and rapidity. They should come off after the university examinations have been completed, and not, as now, immediately at the close of the session. More time could then be given, which will be necessary if the tests are to be made more practical. As the number of candidates increases, the examiners on each branch should be doubled. One centre in each province should be chosen for the sittings of the Board, and in almost each instance this will be the chief town. To go to Quebec for one meeting and Montreal the next,

as is the practice in the Province of Quebec, and to hold an examination in Kingston as well as in Toronto, are touching and tender tributes to age with which a harder generation must soon dispense.

Very much more time must be hereafter given to those practical portions of the examinations which afford the only true test of a man's fitness to enter the profession. The day of theoretical examinations is over.

Permit me to refer to one or two other questions in connection with the medical boards. An anomaly which has been the source of no little irritation results from our close connection with the mother country. Any registered practitioner of Great Britain under the present British act can claim registration in the colonies without further examination. For some years Ontario contested the right, but it was finally settled by the registration of Dr. E. St. G. Baldwin, in 1879, and Dr. A. E. Mallory, in 1880, since which time many have been entered on the register without examination. The Medical Bill which was shelved last year in the House of Commons contained a clause permitting the colonies to make any regulations they pleased concerning registration, and doubtless a similar proviso will appear in any future bill. The objections to receiving British registration are precisely those made against the reception of Canadian registration in Great Britain. The examinations are conducted by corporations with varied standards, of whose proceedings nothing is known, and over which no control can be exercised. But in Ontario the shoe pinches badly in another way. After graduating, students are enabled to give the Board the slip by taking an English or Scotch qualification, and registering in Great Britain, when they return and are entered upon the register without further examination. The objection to this lies in the fact that many men have evaded the just regulations of their province and returned with British registration, when even they could not have qualified for examination at the Ontario Medical Board. With few exceptions, Canadians seek in Great Britain the easier qualifications, particularly the license of Edinburgh Colleges. At some of these the custom has been with Canadian graduates to examine the parchment, accept the University degree, and admit the candidate to examination without any further inquiry. To avoid an injustice, the British licensing bodies must examine the matriculation certificate, and have satisfactory proof by class tickets that a student has spent four years in the study of medicine. Under these conditions registration in Ontario on a British certificate would be no hardship, though there would still be the unfair discrimination against the local institutions.

Through the kindness of Dr. Pyne, the Registrar, I am able to give you some figures bearing on this question. In the past five years 378 men have registered in the Province of Ontario, and of these there were 93 Canadians, who did so on their British registration; that is to say, about one-fourth of the number have avoided the enactments of the Board by proceeding to Great Britain and passing at one of the Colleges. No one can doubt that these 93 men were greatly benefited by the period of additional study and by contact with men of other schools and countries, but they would have been still more benefited if they had first conformed to the requirements of their own province, and aided the profession in maintaining regulations the benefits of which are universally recognized.

The fees demanded by the boards excite a good deal of grumbling on the part of students and practitioners. A sum of $70 is charged by the Ontario Board for the three examinations, matriculation, primary, and final; and in Quebec the registration fee is $20, and the matriculation $10. It is the old story, those who are best treated often complain the most. In the matter of fees, the medical students of Canada are in too easy a position, and they must expect changes in the near future. While the expenses of conducting a medical school have quadrupled in the past twenty-five years, the fees have not increased ten per cent. The charges of the boards are just and reasonable, as well as necessary to meet expenses. The annual tax on physicians of $1 in Ontario and $2 in Quebec, is often spoken of as irksome, but surely it is a trifling contribution to the general welfare of the profession.

It seems extraordinary to outsiders that in a country like Canada, with scarcely five millions of inhabitants, there should be so many licensing boards, and a still greater anomaly, that a licentiate in one province cannot practise in another—that there should be no reciprocity. So it seemed also to many earnest minds a decade or so ago, when in this Association a strong attempt was made at several meetings to frame a Dominion Medical Bill. It failed, as will, I think, subsequent ones, should they be made. Only one remedy remains, the boards of the various provinces may in time so assimilate the curriculum and examinations that reciprocity may become possible, but this we cannot expect for some years. For certain purposes a Dominion Registration Bureau at Ottawa seems specially indicated; thus the surgeon of a Quebec regiment doing duty in Ontario would be practising illegally, and in the marine, the surgeons sailing in the passenger steamers must be registered in the province of the port from which the vessel hails. There would be great if not insuperable objections raised to any such bureau, though it might be feasible to devise a plan for the military surgeons and those belonging to the mercantile marine.

I have dealt thus fully with the constitution and functions of the medical boards of the provinces, because I feel convinced that the safety of the profession rests with them. Of inestimable service in the past, their work in the future will be even more beneficent. Do arouse to a sense of your professional advantages. Where else do the medical men of a country enjoy the rights of conducting their own affairs in their own parliament? Look at Great Britain, where our mighty sister Association, with all her influence, and backed by eleven thousand members, could not force the principle of professional representation into the last medical bill, and at the best was only able to secure three or four members from the profession at large. Rest content, when in each Province of this Dominion you have (1) an elective representative assembly (medical board, council, or college), with members from each teaching body; (2) absolute control of preliminary qualifications, curriculum, and examinations for the license to practise; (3) appropriate accommodation for the meetings of the boards, for the conducting of examinations, and for preservation of the local and general archives of the

profession. The full development of the Acts of 1788 and 1815 will not be reached until these things are accomplished. The first two you have already won in a majority of the Provinces, the last will perhaps be the most difficult of accomplishment; but I feel confident that the day is not distant when in the capital of each province the incorporated profession will have a stately Æsculapian temple worthy the traditions and aspirations of our high calling.

And here I may reasonably conclude this portion of my theme, which is concerned particularly with the relations of the profession to the community, but I will dwell upon one point. I began by saying that in a well-ordered State every citizen should feel that he has near at hand well-trained men, to whom in the hour of need he may turn with confidence, and ask aid for himself, his wife, or his little ones. That throughout Canada this condition exists, that the community is to-day served by capable and well-trained men, that within reach of the poorest in our smallest villages there is an honest, capable physician, that impostors and charlatans are few; these, gentlemen, are some of the blessings for which we may, lifting both hands to heaven, thank our Medical Boards.

To another important relation of the medical profession to the community I can but briefly refer. One of the most remarkable developments of modern medicine has been the direction of the study of the causes and mode of prevention of epidemic diseases. The principles of preventive medicine have been gradually receiving due recognition on the part of the public, and the necessity for organized effort is generally acknowledged. In this province the effort has resulted in the establishment of the Provincial Board of Health, which is doing a great work, and should receive the active support of the public and the profession. The successful course which it has pursued during the past four years affords a stimulus which the other provinces must sooner or later feel, and sets an example which for very shame they must follow.

2. The medical school. In the progress and development of a profession, the medical school plays an important and essential part. The primary object is the training of young men in the science and art of medicine, to supply the community with fit and proper persons to take charge of the sick and injured, and it is with this aspect of a medical school that the public is naturally concerned. In most European countries the State, as guardian of the public weal, undertakes the control of medical education and subsidizes largely the medical faculties of the universities. In Great Britain this is also done to a slight extent, but everywhere on this continent the schools have arisen as a result of private enterprise. The origin and evolution of the medical school in this country are quite easy to trace. For many years private tuition was the sole means of obtaining a medical education, and the system of apprenticeship prevailed to a large extent. In a series of "grinds" or "quizzes" the preceptor would take his pupils over the whole range of medicine and surgery, and a knowledge of anatomy was obtained by private dissection, which was carried on extensively. The office practice and the daily round furnished clinical material. The student was much with his preceptor, became his friend and companion, and in the course of four or five years, sometimes less, grew really very proficient in the practical working of his profession, and felt prepared to present himself before the Provincial Board. Some of the very best practitioners we have had in Canada received their medical education in this way. Take the Medical Register of Ontario or Quebec and seek out the names of the men which have simply Lic. of the Med. Bd. of Upper Canada or of Lower Canada after them, and we find among them many of the men we know best and respect the most highly. Without doubt, in good hands, the old system had great advantages; the essential, useful, and practical details of professional life were well taught; for the refinements and superfluities, the busy physician found no time. Among the private teachers before medical schools became generally accessible, were some notable men whose names deserve to be mentioned in grateful remembrance. Dr. James Douglass, of Quebec, was a remarkably successful as well as popular teacher, and his pupils had the great advantage of the Marine Hospital. He still lives in peaceful retirement, one of the few links uniting the profession of Quebec to a generation long past. The late Dr. Rolph, from the date of his removal to Toronto in 1831 until the foundation of the Toronto School of Medicine in 1843, was one of the most energetic and successful private teachers, and many of his pupils of that date now occupy prominent positions among us. Even after the troublous times of 1837, when he had to cross the border, the students followed him to Rochester.

The organization of the first medical school arose from the association of two or three men engaged in private teaching, who thought that it would be more advantageous, and save time, if each one taught one or two branches. In 1824, at Montreal, Drs. Stephenson, Holmes, Caldwell, and Robertson gave the first definite course of lectures in medicine delivered in this country. This "Medical Institution," as they called it, became, in 1829, the medical faculty of McGill College, and remained for many years the only medical school in the country. The next attempt was a much more ambitious one. As early as 1835–6 efforts were made to induce the government of Sir John Colburn to establish a faculty of medicine in King's College, Toronto, and elaborate plans were prepared, but nothing came of it until 1843, when a faculty was organized with a full and able staff. A more favorable inauguration of a medical school could not have been devised; with State aid, well-trained and efficient professors, who were in the receipt of salaries ranging from £225 to £350—fine emoluments for those days. From all I can gather, the school was a thoroughly efficient one, and did good work in medical education, but the professors made certain mistakes for which they paid heavily. In opposing the incorporation of the Toronto School of Medicine, which had been organized by Dr. Rolph in 1843, they acted most injudiciously, laid the foundation of future trouble, and too many of them were hostile to the profession in their desire for a better medical act. After an existence of ten years, an act of the Legislature left the University of Toronto with only the academical department, and swept away a medical school which, whatever its faults, had in it the elements of ultimate success, and left the profession and the public at the

mercy of irresponsible schools without foundations and dependent on private enterprise. There can be no doubt that the abolition of the faculty of medicine of the University of Toronto retarded seriously the growth of the profession in this country. The establishment of a well-equipped institution would have been an example and a stimulus to others, and as years passed, the difficulties inevitably associated with the first few years of existence would have vanished.

In 1843 the Montreal School of Medicine and Surgery was founded, and continues as the largest French school in the Dominion. About the same time the St. Lawrence School was started in Montreal in opposition to McGill College, but it had a short life and soon expired. The Quebec School of Medicine next started and become, and continues as the medical faculty of Laval University. In Toronto a third school was added to the existing ones in 1850 by the establishment of the Upper Canada School of Medicine, which, in its first session, became the medical faculty of Trinity College, and after an existence of three or four sessions, ended by the resignation of the professors who refused to submit to certain vexatious test enactments of a religious nature demanded by the corporation. The faculty of medicine of Victoria College was next established in Toronto, for years known as Rolph's School; it terminated its existence in 1869. The Kingston School, organized as a faculty of Queen's University, is now known as the Royal College of Physicians and Surgeons. The faculty of medicine of Bishop's College, Lennoxville, P. Q., was organized in Montreal in 1870. In the same year the faculty of medicine of Trinity College was reorganized and exists now as a separate corporation known as Trinity Medical School. The Medical School at Halifax is the only one which has been started in the Lower Provinces.

The most recent additions to our list have been the Branch of Laval Medical Faculty at Montreal, 1877; the faculty of medicine of Western University, London, Ont., and the faculty of the University of Manitoba, both organized within the past few years; and in 1883, as the outcome of an unfortunate contretemps at Kingston, a School of Medicine for Women was started in that city, and followed by the establishment of another for the some purpose in Toronto.

Of this latest development, there cannot but be a feeling of regret that our friends in these cities should have entered upon undertakings so needless in this country. It is useless manufacturing articles for which there is no market, and in Canada the people have not yet reached the condition in which the lady doctor finds a suitable environment. Look at the facts as they are; even the larger cities can only support one or two; in fact, Quebec and Montreal have none, and in the smaller towns and villages of this country she would starve. For the sake of educating six or eight women annually, of whom at least three or four will go abroad, two more medical schools have been established with full staffs of professors and teachers. We can but hope that at the expiration of the five years for which kind friends have guaranteed the expenses, the promoters of these institutions will be in a position to place their energies and funds at the disposal of the schools devoted to the sterner sex. Do not understand from these remarks that I am in any way hostile to the admission of women to our ranks; on the contrary, my sympathies are entirely with them in the attempt to work out the problem as to how far they can succeed in such an arduous profession as that of medicine.

Exclusive, then, of the schools for women, there are existing eleven teaching bodies throughout the country, three French and eight English, a goodly number to supply the wants of about five millions of people. In Great Britain, with a population of thirty-five millions, there are about 34 medical schools, and in the United States, with a population of fifty millions, there are 139 schools conducted in the interests of the regular profession, so that in comparison with these countries we are very abundantly supplied.

The youngest among us may have watched the incubation and birth, and many of us the gradual growth and development of a medical school. With scarcely an exception every one which has started owes its origin to the individual exertions of members of the profession. There are men present who could tell us that the task is not a light one to-day, but what must it have been to those who began the work fifty or sixty years ago? It was an unending struggle against serious obstacles and difficulties. Money had to be raised for buildings and apparatus, and with but few students and small returns, the marvel is not that only four have succumbed in the struggle, but that so many have survived. The internal difficulties are often the most serious; the brunt of the work in such enterprises always falls on one or two zealous men who have to carry the chief part of the load, and the dead weight of lethargic colleagues has been the heaviest burden to many an ardent spirit.

Debt is the millstone which keeps the young schools under for many years; borrowed money furnishes the appliances, etc., and even in the older schools each addition to the buildings means so much more interest to pay. In only one or two of the faculties connected with universities have the governors even furnished suitable accommodations. The financial condition is for years oppressing, and from session to session the school drags on, living from hand to mouth, barely able to meet liabilities and pay the teachers—at this stage most probably not at all. As the number of students increases so do the finances improve, and, if a school proves popular, the debts may be paid off and the professors receive fair remuneration, but, so long as the attendance is limited, the receipts are only such as will barely meet the expenditures. A difficulty which under the present circumstances seems insuperable, is the fact of absolute dependence for success upon the number of students; small classes mean restricted capabilities for teaching, spiritless instruction, low-spirited professors, and general discontent, particularly on the part of the faculty. Large classes mean perhaps the opposite of all this, but not always; still there is a cheeriness about a professor the benches of whose classroom are well filled. I have known a small entry depress for the session the spirits of a man whose estimation of everything was numerical.

Let us glance at the facts as they stand. I estimate that last season there were in the eleven Canadian schools about 900 students, from whom, with trifling ex-

ception, the entire support of the institutions was derived. Four of the eleven institutions are greedy enough to attract at least 700 students, leaving about 200 to be divided among the seven other schools. With the low scale of fees at present in vogue, I doubt if each student paid more than an average of $80 per annum for instruction, so that the total receipts at the number of students above mentioned would be about $70,000, of which at least $55,000 goes to four of the schools, leaving a balance of not more than $15,000 to be divided among the remaining seven. Now, a modern school of medicine is a serious affair to undertake and equip; there are branches to be taught which require, even in the smallest schools, plenty of room and good apparatus. Laboratories for the practical teaching of chemistry, histology, anatomy, pathology, and physiology must be provided, and arrangements made for library and museum purposes. Personal expenditure on the part of members of the faculty can alone supply these in some of the schools, and in almost all the rule has been that each lecturer from his fees shall provide his own teaching outfit. Where the teacher has enthusiasm and a purse this may work well, and indeed does so sometimes, for I know of an instance of an outlay of over two thousand dollars in apparatus, and of another in which the personal laboratory expenses were always between five hundred and one thousand dollars annually. As matters have been in our schools heretofore, without personal expenditure laboratory equipment has been defective. The remarkable impetus which has been given of late to practical teaching has increased very much the expense of conducting a school, for not only have the laboratories to be provided, but special men must be forthcoming with special training. The general practitioner who has for eight or ten years been busy at practical medicine and surgery may step into the professor's chair and give a good, sensible course of lectures; but to conduct laboratory work demands careful and prolonged training, which costs much money, and when obtained has a market value.

One great evil which results from this condition is the competition for patronage among the schools, which I have already alluded to as a danger to be carefully watched by the profession. Too many of the students enter upon the study before they have means sufficient to carry them through the entire course, and they seek special inducements, reduction in fees, exemption from attendance until Christmas, and will often in letters set off one school against another in a most amusing way. Think, gentlemen, to what the unrestricted competition among eleven schools for 900 students might bring the profession! It would be a struggle for existence in which the public and the profession would certainly be the losers, but with the wise regulations already referred to, existing in each province, the competition is reduced to reasonable limits, as all students, irrespective of their schools, must virtually pursue the same plan of study and for the same length of time.

What is the remedy? The small schools have rights equally with the large; they cannot be asked to immolate themselves in the interests of more favored institutions. It is plainly within the duty of the provincial boards to inquire into the equipment of the teaching bodies, and they should refuse recognition to those which have not appliances fit to conduct a modern medical course; or, what would be better still, the medical boards should have the power of prohibiting the establishment of a new school until satisfied that its promoters had money sufficient to begin such an enterprise, and had suitable buildings and hospital accommodation. In the future one of two things will take place: either a considerable number of the small schools will die of starvation—for it is quite evident on the above financial statement, which is approximately correct, that there are seven existing on class fees which could only support one, and that in a not very flourishing manner—or means must be devised to secure funds from other sources. That there are superfluous schools in the country, no one can deny, and the death of three or four under present circumstances would be no loss to the profession or the public; but if all could be furnished with suitable clinical and scientific equipments, they would then prove a source of strength, not of weakness. Dependent solely on class fees, the smaller schools, even with the self-sacrifice of professors which I know of in many instances, cannot hope to keep up with the modern requirements in medical teaching, and the larger schools, with their increased expenses and increased salaries, are really not much better off. The time has come when we should lay clearly before the public the needs of higher medical education. The full development of a school cannot be reached without extraneous aid. To build laboratories and provide costly apparatus require sums quite outside the power of the faculties or the professors to supply. We should learn a lesson from our brethren of the clergy. Ask in Toronto and Montreal the purpose of so many beautiful and costly buildings clustering about the universities of these towns, and we are told they are the divinity schools, in many instances erected at the cost of individual donors. The number of men in this country is rapidly increasing who have money to give where they see it is needed and will be profitably employed; and if those interested in medical education bestir themselves actively, suitable endowment can be obtained. We have not asked before—in careless unconsciousness of our needs—but we must ask now and ask earnestly. The successful appeal for $100,000 made last year in Montreal is at once an indication and an encouragement. There are strong, enlightened men among us, like the Hon. Donald A. Smith, who feel, with Descartes, that the hope of the amelioration of many of the ills of humanity lies within our profession, and that it is a public duty and privilege to assist in making our colleges true seats of learning, as well as schools of sound instruction.

3. The medical society. In a young country the organization of medical societies is associated with serious difficulties. In cities practitioners can easily meet together, but in communities scattered over a wide extent of territory, like Canada, general societies are not readily established. Thus we find that several attempts were made to organize a Canadian Medical Association, but without success until the confederation of the provinces in 1867. In 1845 the Medico-Chirurgical Society of Montreal sought to secure a Provincial Medical Association, and called a conference of delegates from the societies in the city and district of Que-

bec, and the district societies of Niagara and Toronto. A meeting of the delegates was held on the 20th of August, but the scheme was unfortunately frustrated. In 1850 the same Society again sought to unite the profession of Canada in a British-American Medical and Surgical Association, and on July 10th, at Three Rivers, a preliminary meeting was held, at which a constitution and short code of by-laws were adopted. Dr. Morin, of Quebec, was elected President, and Dr. Hall, of Montreal, Secretary, and the first general meeting was arranged to take place in Kingston on the second Thursday of May, 1851. I do not know that it was ever held; the journals of the day are silent on the subject.

At the instigation and call of the Quebec Medical Society, a meeting was held at Laval University on October 9, 1867, to consider the advisability of establishing a Canadian Medical Association. The organization was successfully effected, and the first meeting was held in Montreal in 1868 under the Presidency of Doctor, now Sir Charles, Tupper.

Among the objects which the promoters sought to effect by united effort was satisfactory and harmonious medical legislation, and we find that, for the first four sessions the time of the Association was chiefly occupied with the framing of a Dominion medical bill, which ultimately proved an impracticable measure, and was dropped. The subsequent meetings have been devoted to more legitimate topics of discussion, and we have reached a truer conception of the objects of our annual gatherings. We are all agreed, I think, that the highest work which an Association such as ours can undertake is the promotion of the scientific and practical aspects of the profession. To these meetings the best minds among us should bring their best thoughts, that, by the reading and discussion of papers, we may be mutually benefited. Every member can bring something. One great attraction in our profession is its freshness and novelty. Each one of us has had, since our last meeting, opportunities for the study of problems in disease, new, perhaps unexpected, and which may not occur to us again. Material for original work and research lies in the daily round of each one, awaiting only the spirit of patient and earnest inquiry, lacking which we cannot wonder that men deem the practice of medicine dull, stale, and flat. Every one should come to learn, and of necessity brings with him something he can teach, for in certain points his experience supplements what is wanting in another's. To our gatherings all teachers in our schools should come to meet their brethren and give to them an account of their stewardship—for do they not hold their positions in trust?—and show by their work and ways that they merit the confidence reposed in them. The more we foster the scientific features of our gatherings, the more successful will the Association be. It has been so with our sister associations in Great Britain, and in France and Germany the corresponding societies form sections of the general associations for the advancement of science, and the meetings are devoted exclusively to work.

By no means the smallest advantage of our meetings is the promotion of harmony and good-fellowship. Medical men, particularly in smaller places, live too much apart and do not see enough of each other. In large cities we rub each other's angles down and carrom off each other without feeling the shock very much, but it is an unfortunate circumstance that in many towns the friction, being on a small surface, hurts; and mutual misunderstandings arise to the destruction of all harmony. As a result of this may come a professional isolation with a corroding influence of a most disastrous nature, converting, in a few years, a genial, good fellow into a bitter old Timon, railing against the practice of medicine in general, and his colleagues in particular. As a preventative of such a malady attendance upon our annual gatherings is absolute, as a cure it is specific. But I need not dwell on this point—he must indeed be a stranger in such meetings as ours who has not felt the glow of sympathy and affection as the hand of a brother worker has been grasped in kindly fellowship.

There is special need in this country for such an association. With scattered and isolated provinces, self-governing, and regulating their own affairs, this organization is the sole bond of professional union. At these meetings we are neither of Ontario nor Quebec, of Manitoba nor Nova Scotia, but of Canada, and the narrower provincial spirit is lost in a wider national feeling. In the future development of the profession this body must take an ever-increasing share. It has difficulties to contend with of a geographical nature, as the distances between our provinces are so great, but these must not be considered. A peripatetic association always labors under certain disadvantages, but these we have in common with similar bodies in other countries. The provincial medical societies which have been established, supplement the work which we do and are a source of strength. We regret that there are still one or two provinces without such organizations. The district societies throughout the country are becoming more and more vigorous, and physicians are everywhere recognizing the advantage of coöperation in the study of our profession.

Let me refer to two other matters in conclusion. In selecting the place of meeting the Association should be guided by what is thought best for the interests of the profession, and it should be distinctly understood that when we meet at any place the sole business of the local profession is to arrange suitable accommodation; and this Association must set itself strongly against past practices by which the profession of a place has been heavily taxed for entertainment. In this we should follow the custom of the British Medical Association, at the meetings of which all the members subscribe to the association dinner; and I should ask for the reappointment of the committee to revise the by-laws and constitution, as there are certain changes which will facilitate the work of our meetings and which should be brought up for discussion at as early a date as possible.

And now, gentlemen, I have done, and there remains but the expression of my thanks for the kind attention you have given to a very matter-of-fact address, but I cannot part with you on this occasion without assuring through you, my brethren in Canada that, although no longer of them, I am still with them in spirit, with them in their persistent efforts to advance the higher interests of our profession, and united with them by a thousand bonds of fellowship and friendship, which absence shall not weaken nor time efface.

ORIGINAL ARTICLES.

DISINFECTANTS.

PRELIMINARY REPORT OF THE COMMITTEE ON DISINFECTANTS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

XX.

ZINC CHLORIDE.

BY GEORGE H. ROHE, M.D.,
PROFESSOR OF HYGIENE IN THE COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE.

IN his classical essay on disinfection,[1] Koch expresses astonishment that an agent, which proved almost entirely inefficient as a germicide in his experiments, should have obtained the widespread reputation as a disinfectant which chloride of zinc enjoys. He shows that anthrax spores, exposed to the action of a five per cent. solution (1 : 20) of this salt for thirty days, germinated as freely upon a suitable culture medium as similar material not so exposed. The development of micrococcus prodigiosus was only slightly retarded by exposure for upwards of sixteen hours to a one per cent. (1 : 100) solution. Anthrax spores developed freely in a one-tenth per cent. (1 : 1000) solution of this salt.

Mr. A. W. Blyth[2] says, a one per cent. (1 : 100) solution seemed to stimulate the growth of anthrax spores; five per cent. (1 : 20) failed to destroy their vitality; while twenty-five per cent. (1 : 4) seemed to arrest the life of the spores.

Dr. Sternberg[3] found two per cent. (1 : 50) destructive of the micrococcus of gonorrhœal pus; while one-half per cent. (1 : 200) destroyed the power of development of the septic micrococcus. In Sternberg's later experiments[4] ten per cent. of Squibb's liquor zinci chloridi (said to contain fifty per cent. of anhydrous chloride of zinc) was found effective in destroying the organisms of broken-down beef-tea. Numerous experiments have shown that these organisms are fully as resistent to most germicides as are the spores of B. anthracis. In order to clear up the apparent discrepancy between these observations of Koch and Sternberg, an additional series of experiments has recently been made by the latter, assisted by Dr. A. C. Abbott. These experiments showed that the spores of B. anthracis are not killed by an exposure for two hours to a ten per cent. (1 : 10) solution of this salt. A five per cent. (1 : 20) solution, acting for the same period was, however, effective in destroying the spores of B. subtilis, and upon broken-down beef peptone solution, which had been freely exposed to the air, and consequently contained a variety of microörganisms. A two and a half per cent. solution (1 : 40) failed to sterilize putrid beef-peptone solution.

The above experiments indicate that zinc chloride, in the proportion of five per cent. added to the material to be disinfected, can be relied upon for the destruction of microörganisms in the absence of spores. To destroy the vitality of anthrax spores, however, a twenty per cent. solution is necessary.

[1] Ueber Desinfection: Mittheilungen a. d. Kais. Gesundheitsamte, Bd. I. S. 261.
[2] Medical Times and Gazette, Oct. 11, 1883.
[3] Am. Journ. of the Med. Sciences, April, 1883, p. 331.
[4] THE MEDICAL NEWS, Feb. 7, 1885.

CASE OF STRYCHNINE POISONING TREATED BY THE EXTRACT OF WILD CHERRY BARK, CHLOROFORM INHALATION, ETC.; RECOVERY.

BY GEORGE M. KOBER, M.D.,
A. A. SURGEON, U. S. ARMY.

THE following extract from a letter from Lieut. J. A. Hutton, U. S. Army, dated Berkeley, Cal., January 22, 1885, recalls to my mind a case of strychnine poisoning, which is, perhaps, of sufficient importance for publication:

"If my memory serves me, I once heard you speak of a treatment for poisoning by strychnine by administering extract of wild cherry bark. Can you refer me to the article on the subject, or give me any examples of the use of the extract in such cases?"

The following is my reply:

I have been looking for the article you refer to, but without effect; my impression is, that I received my first suggestion of the use of hydrocyanic acid in strychnine poisoning from the *American Journal of the Medical Sciences*, either in 1870 or 1871, and about three years ago from some Kansas medical journal, which had been sent to me as a specimen number. This must have been in December, 1881, for, on the 21st of December a case of strychnine poisoning occurred in a Chinaman at this place; the symptoms were well pronounced, and after washing out the stomach, I administered a tablespoonful of the extract of wild cherry bark, and repeated the dose in twenty minutes; the tetanic paroxysms diminished in frequency and force, and were readily controlled by the inhalation of chloroform. The alarming symptoms in the case lasted, however, nearly two hours, yet there was evidence of progressive improvement, and the immediate effect of the wild cherry pointed to an antagonistic action. After the expiration of two hours, the only remaining symptoms observed were involuntary twitches and a feeling of stiffness in the muscles, for which potass. bromide and chloral were given with good effect; 15 grains of the former and 10 grains of the latter soon induced rest and sleep for a few hours. The patient recovered perfectly in two days, complaining only of being tired during this time.

My reason for not publishing the case before, was the insufficient evidence of the fact that the extract of wild cherry bark proved absolutely antagonistic to the action of strychnine. You will observe that the stomach had been thoroughly evacuated, the quantity of the poison introduced was unknown, and the effects of chloroform inhalation cannot be overlooked.

I have seen in recent years no authority of weight for the use of hydrocyanic acid in strychnine poisoning, but the subject is sufficiently important to experiment on animals and thus determine whether the extract of wild cherry bark possesses advantages over

prussic acid, and I hope you have the time and facilities at the University Laboratory to make this subject, as well as the antagonism of strychnine and woorara, tobacco, chloroform, chloral, calabar-bean, potassium bromide, camphor, tannin, morphine, apomorphia, atropia, nitrite of amyl, and carbonic acid, a basis for experimental research and report. The action of apomorphia in strychnine poisoning has been but little studied and may prove of special value. I know of only one instance in which it has been used (*vide American Journal of the Medical Sciences* for April, 1878, page 448).

At all events, such experiments intelligently conducted and honestly reported, will be of great value and are highly appreciated by the profession. Of course, this field has been worked by others, but I doubt whether very many experiments of this nature are repeated sufficiently often by independent observers. I believe we are too apt to accept the conclusions of others as our own. The labors I suggest will either prove or disprove the work of others, and as such, will possess merit and receive due credit.

The above correspondence conveys all I have to say on the case, and is submitted without further comments.

FORT BIDWELL, CAL., Jan. 28, 1885.

MEDICAL PROGRESS.

THERAPEUTICS OF JABORANDI.—M. PETITHAN, in a paper upon the therapeutic uses of jaborandi, claims its efficacy in the treatment of the following diseases:

1. In all catarrhal and rheumatic affections, subacute or chronic, whatever may be their localization.

2. In all dropsical conditions, without alteration in the kidney, when anæmia is not too marked.

3. In certain cases of pernicious intermittent fever in which reaction is hastened without affecting the action of quinine.

4. In malignant febrile exanthemata, especially in scarlatina.

5. In diseases of the skin, characterized by dryness, psoriasis, etc.

6. In chronic syphilitic disease during the employment of mercury and the iodides.

7. In mercurial intoxication.

8. Probably in diphtheria.

The remedy, according to M. Petithan, should be used as follows:

1. It should be administered the patient fasting.

2. The dose should vary according to the case, 60 grains being an average quantity.

3. The temperature of the infusion should vary according to the degree in which the sudorific effect is desired.

4. A local temperature of at least 66° F. should be constantly maintained.

5. The patient should not be permitted to leave his bed on any pretext unless well covered, in order to avoid variation of temperature and syncope, which may result therefrom.

6. Warm drinks should be administered, if the patient is thirsty, a condition very rare owing to the salivation produced by the drug.

7. The employment of a good quality of the drug, that of Coutinho being the best.

8. To have at hand stimulants such as ammonia, etc., to sustain the patient.

9. If necessary to administer an antidote; M. Petithan suggests the employment of belladonna.—*Bulletin Général de Thérapeutique*, July 15, 1885.

STRETCHING OF THE LIGAMENTS OF THE KNEE-JOINT OF A CHILD AS A RESULT OF VERTICAL EXTENSION IN FRACTURE OF THE THIGH.—DR. GEORGE FISCHER, in the *Deutsche Zeitschrift für Chirurgie*, reports a case of stretching of the ligaments of the knee-joint of a child by vertical extension applied in a fracture of the thigh.

The patient, a boy six years of age, was treated for fracture of the thigh by suspension of the limb, and the application of an extension weight of six pounds. Twenty-four hours subsequent angular dislocation of the fracture being observed, an additional weight of five pounds was added to the extension weight, with the result of bringing the fragments into position.

The child remained without pain or fever, and was cheerful. In four weeks the dressing was removed, but the child was unable to stand upon the right leg, and on making the attempt shrieked with pain. Examination showed the fracture to be perfectly united, and also that there was abnormal mobility of the knee-joint. The motion at the joint, both backward and forward, in abnormal extension, was easily made, while, at the same time, the exaggerated motion of the joint was easily heard and felt; and when the foot was raised the leg was placed in such extreme hyperextension that the popliteal space lost its concavity and became convex. Bending the knee produced extreme pain. The circumference of the right knee was two-fifths of an inch greater than that of the left.

The patella was movable, and no effusion was recognizable in the joint. One bandage was applied extending from the foot to the middle of the thigh. In two weeks the child arose from bed and walked about. Two weeks later the bandage was removed and the joint was found entirely normal.

The history of the case shows, beyond doubt, that the abnormal mobility of the joint was due to stretching, not to rupture, of the lateral and cruciform ligaments. The latter condition undoubtedly would have occasioned an extracapsular effusion of blood, or have produced protracted weakness of the joint, since even when the cruciform ligaments alone are concerned, the latter persists through many months, and even years.

TREATMENT OF PHTHISIS.—The unsatisfactory state of the treatment of phthisis and the position of M. Germain Sée as a practical physician may be regarded as sufficient reasons for a reopening of the investigation of terpine as a therapeutical agent. A careful account of M. Sée's study of the subject may be perused in the *Bulletin de l'Académie de Médecine*, No. 30. Terpine is believed to be a powerful agent in modifying the respiratory mucous membrane, and in diminishing morbid secretions. It is said to diminish, and even to cause to disappear altogether, the purulent secretion of catarrhal forms of phthisis. The muco-purulent secretion that proceeds from the bronchial tubes irritated by tubercles and that which comes from the walls of pulmonary cavities are the indications for the use of terpine when-

ever these secretions are sufficiently abundant to exhaust the patient. Terpine is useful in the hæmoptysis of incipient tuberculosis—that is, before the development of cavities with aneurisms in their walls. In the treatment of catarrhal pneumonia and chronic bronchitis, independent of asthma, that only induce dyspnœa by plugging of bronchi, terpine constitutes the best means of lessening the bronchial hypersecretion. Its prompt action and freedom from disagreeable physiological effects ought to make it a preferable preparation to those containing impure forms of turpentine. On account of its perfect harmlessness and easy digestibility it has advantages over creasote. The best method of administration is in the form of a pill, or as an alcoholic preparation; the most convenient dose is one gramme. In nervous asthma, whether emphysematous or catarrhal, iodine and pyridine are incomparably superior to terpine. Terpine is a derivative of turpentine; it is the binhydrate of turpentine, and may be represented by the following formula: $C_{20}H_{16}(H_2O_2) + 2(H_2O)$. It is formed by the direct union of its component elements when turpentine is allowed to remain in contact with water.—*Lancet*, Sept. 5, 1885.

INFLUENCE OF THE SUN UPON THE GROWTH OF THE SPORES OF BACILLUS ANTHRACIS.—ARLOING, at a recent meeting of the Académie des Sciences, made the following report of his researches upon the influence of the sun upon the vegetability of the spores of the bacillus anthracis. The investigations were conducted as accurately and precisely as possible, and Arloing concludes:

1. If by vegetability is meant the power which the sporiferous mycelium or the free spores possess of producing a new mycelium, it is evident that this is rapidly suppressed by the heat of a July sun in bouillon in which recent cultivations have been made. Exposure for two hours to a temperature ranging from 95° F. to 102.2° F., was sufficient to produce such result.

2. When the influence of the solar heat is exercised less than two hours, vegetability is simply suspended.

3. The effect produced is the result of the solar rays, per se, varying with their intensity, and is the result neither of the calorific rays of the spectrum nor of the luminous rays.—*Gazette Hebdomadaire de Médecine et de Chirurgie.*—August 28, 1885.

A CASE OF CHRONIC PARENCHYMATOUS NEPHRITIS CURED BY THE SUBCUTANEOUS INJECTION OF PILOCARPINE.—DR. J. LAZARUS reports a case of chronic parenchymatous nephritis cured by hypodermatic injections of pilocarpine.

The patient, when first seen by Dr. Lazarus, May 11th, had been ill several months, and his entire body was swollen and shapeless. The legs, belly, and scrotum were enormously distended, and the last was attacked by superficial gangrene. Both buttocks, both thighs, and both legs, as well as both feet, were the seat of pus-discharging ulcers, due to phlegmonous inflammation of the subcutaneous cellular tissue. A bedsore in the sacral region added to the pain and discomfort of the patient. Great difficulty in breathing was also experienced, and profuse diarrhœa was present. The urine was scanty, and had a specific gravity of 1040, and in consequence of the great amount of suspended material, composed of epithelial scales, detritus, etc., was cloudy, and even before the boiling point was reached was converted into a stiff jelly.

On inquiry it was learned that the present condition began entirely unnoticed, and that in February the swelling of his feet led him first to seek professional advice. Continuing his employment until April, he was at last compelled to remain in bed, owing to the increased swelling of his feet and to extreme weakness, and to subject himself to systematic treatment.

Treatment consisted in the employment of hot baths and in the medication generally employed in the treatment of Bright's disease, but no improvement resulted. Dr. Lazarus at once determined to resort to the hypodermatic use of pilocarpin. Previous to the administration of the drug, a small quantity of brandy was given to support the heart, and followed by the injection into the thigh of one-third of a Pravaz's syringeful of the following:

℞.—Pilocarpin. muriat. . . . . gr. iss
Aquæ dest. . . . . f℥iiss.

The patient at once began to perspire abundantly, and for six hours was continuously bathed in perspiration; at the same time abundant salivary discharge was excited, amounting the first day after the injection to fully a quart.

The only unfavorable symptoms noted subsequent to the administration of the drug, were repeated vomiting and difficulty in swallowing. Brandy in quantities of a teaspoonful was administered two or three times hourly, and no symptoms of collapse were manifested. The second day a half syringeful of the same solution was injected, the third day two-thirds, and the fourth day a whole syringeful, and for three weeks subsequently a like quantity was injected into each thigh alternately.

The quantity of urine increased under the treatment from eleven ounces per diem, having a specific gravity of 1040 at the time of the first injection, to more than two quarts, with a specific gravity of 1002 at the twentieth injection. With the twentieth injection the dropsy had entirely disappeared, and the extreme emaciation of the patient became apparent. In the region of both trochanters, on the outer side of each thigh, as well as upon the outer side of the legs, there were large purse-like expansions of the cutis, due to phlegmonous inflammation in the subcutaneous cellular tissue, fluctuating and painful on movement.

Believing that the small quantity of albumen still persisting in the urine, and the feverish condition of the patient, were a result of these purulent collections, Dr. Lazarus opened the pouches at brief intervals, and treated them antiseptically with iodoform gauze and drainage; they rapidly healed, as did also the bedsore and superficial gangrene of the scrotum. At the same time the secretion of urine rapidly increased, so that the quantity passed exceeded the normal, reaching three to four quarts daily. The cicatrization of the last suppurating cavity was followed by the entire disappearance of albumen from the urine. The patient was finally subjected to further treatment by hot baths, and daily increased in strength, his health finally becoming entirely restored.—*Wiener Med. Presse*, August 2, 1885.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, SEPTEMBER 26, 1885.

CARCINOMA OF THE RECTUM.

IN the *Beilage zum Centralblatt für Chirurgie*, No. 24, 1885, DR. KRASKE, of Freiburg, describes an operation for the removal of carcinoma of the rectum, in which the growth is seated too high to be extirpated by the usual method, and too deep to be reached by laparotomy. The patient having been placed upon the right side, a median incision is carried from the second sacral vertebra to the anus; the left gluteus muscle is severed from its attachment to the sacrum; and, after excision of the coccyx, the tuberoso-sacral and spinoso-sacral ligaments are detached from the sacrum, when, by forcibly retracting the wound to the left, access to the upper portion of the rectum is greatly facilitated. The operation may be rendered still less difficult by severing, with the chisel, a portion of the corresponding lateral mass of the sacrum, the section being made in a concave line, which, beginning at the outer border of the third sacral foramen, curves downwards and inwards, traverses the fourth sacral foramen, and terminates at the cornu of the sacrum. Conducted in this way, the procedure spares the ventral branch of the third sacral nerve, and the sacral canal is not opened.

The operation, thus briefly described, has been performed by Kraske on two patients, both of whom recovered. Of the final results, however, we have no information, as the cases were evidently recorded shortly after recovery. Should the future show that the subjects were permanently relieved, the end surely justifies the means; but unless such a termination be reported, we think that surgeons will be slow to adopt the procedure, especially when they remember that carcinoma of the first portion of the rectum is usually firmly adherent to the sacrum, and that lymphatic involvement is present in not a few cases.

In rectal carcinoma which is beyond the reach of extirpation from the perineum, we take it that the interests of the sufferer will be best promoted by resorting to right or left lumbar colotomy, or establishing an artificial anus in the iliac region. Instead of performing an ordinary lumbar colotomy, the entire calibre of the gut may be divided, its central end attached to the external wound, and the peripheral end returned into the belly, after closure of its lumen. By adopting this suggestion, which originated with Madelung, of Rostock, there will be less disposition to prolapse of the gut, the mechanical, septic, and chemical irritation, to which the carcinoma is subjected by the retention and passage of the feces in the ordinary operation, is removed, and the annoyance, pain, and discomfort which result from the accumulation of feces between the tumor and the external sphincter are prevented.

That these advantages of Madelung's procedure are not imaginary is shown by a case recorded by SONNENBURG, in the *Berliner klinische Wochenschrift*, No. 35, 1885, but in which the operation was performed through the belly. In an example of carcinoma of the upper portion of the rectum, that surgeon attempted to extirpate the disease by a median laparotomy, but the adhesions were so firm and so numerous that removal was impracticable. The central end of the gut was, therefore, attached to the outer wound, and an artificial anus was established, through which the patient had a regular morning evacuation, the bowels remaining quiet during the intervals. There was an occasional discharge of a little mucus from the normal anus; there was entire freedom from pain; and the patient was gaining flesh at the date of the report.

In the same class of cases, Verneuil prefers to make an artificial anus in the iliac region. Instead, however, of practising the ordinary operation of Littre, he fixes the colon in the wound with about fifteen metallic sutures, and resects the anterior three-fourths of its wall, leaving the posterior fourth, with its mesocolic attachment, to form an éperon or spur, which prevents the passage of feces into the inferior portion of the gut. Although this operation, which is described in the *Semaine Médicale*, for April 1, 1885, is intended to meet the same indications as that of Madelung, we regard it as being inferior to the latter.

THE PUERPERAL FEVERS.

THE second volume of *Barnes's Obstetric Medicine and Surgery* has just appeared, and we turn with especial interest to that part devoted to what has been known as puerperal fever, but which recent ob-

stetric writers have generally called puerperal septicæmia. Here we find nearly one hundred pages given not to puerperal septicæmia, or to puerperal fever, but to "the puerperal fevers." For Dr. Barnes there apparently are four of these fevers, the classification resting, as it seems to us, not so much upon their clinical histories, as upon their asserted etiology. The general statement made by him is, that puerperal fevers are autogenetic, or heterogenetic. The autogenetic fevers are caused by endosepsis, of which there are two varieties, one arising from prolonged labor, nervous and muscular exertion causing a peculiar alteration of the blood, and the other from the non-elimination of effete material thrown into the blood by the involution which follows labor; or the fever may be caused by autosepsis, this term signifying absorption of putrid material which arises from necrosed or decomposed tissues of the mucous membrane of the genital canal, or from decomposing clot or fragment of placenta that has been retained. Hetero-infection is caused by infection or inoculation with some foreign poison: this is exosepsis. "Thus we may understand," says Dr. Barnes, "that there may be a simple endosepsis, that autosepsis is grafted upon endosepsis, and exosepsis is a compound of all three." We do not understand how exosepsis is a compound of all three, that is, of itself, of autosepsis, and endosepsis, especially, when a moment before it was stated that it was caused by "some foreign poison." However, the underlying fact in all is septicæmia.

The author proceeds to state:

"Thus we arrive at the demonstration of the fallacy so often uttered that scarlatina in a puerpera is scarlatina and nothing more. It is something more. It is the foreign zymosis grafted upon the puerperal condition, and modified by it. If the foreign zymosis do not find at the moment of its entry an existing autogenetic fever, this is instantly and necessarily produced." This statement is too absolute, as several published cases of the so-called puerperal scarlatina testify. Indeed, Dr. Barnes himself on a subsequent page contradicts it, saying, "so in some healthy puerperæ the scarlatinal poison runs a simple course, all the special phenomena appearing in due order."

According to Dr. Barnes, endosepsis produces a fever possessing little or no infective property; autosepsis and exosepsis are highly infective. Might not this statement be given another form? Mild cases of puerperal septicæmia are not as contagious as the grave ones. And, further, if autosepsis and exosepsis are highly infective, is it not rational to believe that their essential cause is one? Nay, take all the different varieties of sepsis, those with little, as well as those with great infective power, do they not point to unity of cause?

One thing we are especially glad to see in Dr. Barnes's exposition of the puerperal fevers, is that he denies the existence of simple traumatic fever, which is given such an important place by the German obstetric writers especially, among whom we may mention Kleinwächter.

In the course of the article in relation to etiology, Dr. Barnes says: "Everything is prepared for inflammation. The local injury, the hyperinotic blood charged with effete matter, are there; an exciting cause is alone wanting. A chill is sufficient." But is the chill of puerperal septicæmia cause or consequence? While it occurs in the great majority of cases, most authorities regard it as an indication that infection has already occurred, it is the first manifestation, not the cause of the fever: it is the cry of alarm, the signal of distress.

Several questions are suggested by Dr. Barnes's opinions as to the etiology of the puerperal fevers. For example, if protracted labor produces endosepsis, why do so many primiparæ escape? They have muscular and nervous exhaustion in most cases, yet it is altogether exceptional for them to have septicæmia; a common cause ought to produce its effect in the majority, instead of in a very small minority of cases. Again, may it not be that the necrosed tissue of the genital canal, or the decomposing clot, or placental fragment in the uterus furnishes merely the nidus in which the germ-poisons entering from the exterior are developed? Would it not be quite as rational, instead of having so many varieties of sepsis explaining the mild and grave cases of the disease, to hold that the susceptibility to the poison differs, in different subjects, or that the quantity and quality of the poison vary? No one doubts the unity of the scarlet fever poison, and yet how various its manifestations in different subjects and in different epidemics. In the one case there is variety in the individual constitution, and in the other in that of the poison, though it is continually the same.

It is probable that all varieties of puerperal septicæmia depend upon one cause: this opinion rests in part upon analogy, in part upon the clinical history of the disease, and in part upon experiments made upon animals. That this cause is a *contagium vivum* is also probable from the rapidity of development of the poison—life can only explain such rapid evolution and multiplication. The remarkable results obtained, both in the prophylaxis and in the cure of puerperal septicæmia, by the use of antiseptics—the most efficient germicides being the most useful—tend to confirm this conclusion. Finally, this view is in conformity with much that science has taught us in regard to several other diseases which have been proved to be caused by living germs.

Delore, in his *Traité Pratique de l'Art des Accouchements*, Paris, 1883, remarks that the primary cause of puerperal septicæmia is the introduction of

bacteria into the organism of the puerpera, and that he himself was the first to place this beyond doubt. He found bacteria in the lochia, in the uterine cavity, and in the peritoneal serosity of women attacked with puerperal fever. He inoculated rabbits with the diseased fluid, and they died of purulent fever.

Rather than accept Dr. Barnes's quadrilateral septicæmia, we would prefer adopting the creed of Siredey: "We do not believe in *autoinfection* of the puerpera. For us all alterations are due to hetero-infection, and the constancy of the uterine lesions, and of their primordial appearance, leads us to regard the genital wound as the exclusive seat of the inoculation."

BACTERIA IN THERAPEUTICS.

PROFESSOR CANTANI, of Naples, has taken advantage of the well-known antagonism of certain forms of bacteria to each other in cultures to make a novel experiment in therapeutics. After satisfying himself of the harmlessness of the bacterium termo when injected beneath the skin, or inhaled, or taken into the stomach of animals, he proceeded in a case of phthisis to attack the bacillus tuberculosis with this common and vigorous microörganism. The case was one with an extensive cavity in the left upper lobe, high fever, and copious expectoration, in which there were elastic fibres and numerous tubercle bacilli. Animals inoculated with the sputum became tuberculous. The case had resisted the ordinary methods of treatment, and was getting steadily worse. On the 4th of May inhalations of a spray of a pure culture of bacterium termo were begun, with the effect of rapidly reducing the amount of expectoration, and diminishing the number of the tubercle bacilli. The fever subsided, and the condition of the patient rapidly improved. On the 1st of June the tubercle bacilli could no longer be found in the expectoration, only the bacterium termo, and inoculation of the sputum in animals failed to produce tuberculosis. It is not to be supposed that the bacteria destroyed the deep-seated tubercle bacilli, but in recent cases of slight extent and superficially situated the method may prove of some service, though the difficulty of carrying out the details is a serious objection to it.

GONORRHŒA A GERM-DISEASE.

THE dependence of gonorrhœa upon specific germs is being more clearly shown, and is receiving more general professional acceptance. MARTINEAU asserts in the *Archives de Tocologie*, for September, that the gonococcus is absolutely characteristic of gonorrhœal inflammations, as all recent investigations demonstrate.

BUMM, of Wurzburg, has recently published a work upon the microörganism of gonorrhœal diseases of mucous membranes, an analysis of which is given in a recent number of the *Centralblatt für Gynäkologie*. He has given much time to the study of the subject, and the results of his observations and experiments are of great interest.

Bumm states that gonorrhœal bacteria, in contradistinction to all other forms, may enter the cell protoplasm, there reproduce, and form a round mass about the nucleus.

In all gonorrhœal inflammations gonococci can be found, provided no disinfectant treatment has been used previous to the examination. Secretions free from gonococci will not produce infection of a mucous membrane, while those containing even a minute number cause gonorrhœal inflammation.

Bumm succeeded in getting a pure culture of gonococci from a gonorrhœal conjunctival secretion, and inoculating the urethra! mucous membrane of a woman with this culture caused typical gonorrhœal urethritis. He is disposed to reject most of the culture experiments made by others, but surely those of Paul, referred to by Martineau, and made known to the Société de Thérapeutique last October, were carefully made, and gave similar results to that of Bumm.

Martineau states, in his *Leçons Cliniques sur la Blenorrhagie chez la Femme*, that the micrococcus or gonococcus of gonorrhœa has been constantly found in gonorrhœal pus whether the disease affect the urethra, the vagina, the conjunctiva, the uterus, the vulva, the urethral or the periurethral follicles, or Bartholin's glands. "It is beyond doubt," he asserts, that "gonorrhœa is a venereal affection, virulent and contagious, *sui generis*, having its own individuality, and that it can only be reproduced by an infectious agent always the same."

THE PROFESSION IN CANADA.

FROM the admirable address of Dr. Osler, delivered at the meeting of the Canadian Medical Association at Chatham we gather some interesting details with reference to the state of the profession in the Dominion. In certain directions it appears to have made satisfactory progress, and to have reached a high degree of development.

The question as to who should rule, the profession or the medical schools, seems to have been settled at an early period, though not without a struggle. The Boards elected from the practitioners in each province have now full control over all matters relating to medical education and licensing, and the teaching bodies must conform to their requirements. The system is thoroughly democratic, and seems to meet the serious problem of the profession, viz., the unrestricted competition between the schools. It matters little if the requirements for the degree are easy, so long as those for the license to practise

are rigid. It is well known in Germany that the Staats-examen for admission to practise is more dreaded by the students than the examination for the Doctor's degree, though it bears the name *tentamen rigorosum*. For the Commonwealth to permit a profession to regulate its own affairs, and to say what the conditions of admission to it shall be, does not seem strange. The lawyers enjoy just such privileges. But we have to deal in this country with a profession jostled by a crowd of irregulars, who claim equal rights, and who have often a controlling influence in the Legislatures, so that the difficulties in the way of uniform legislation are almost insuperable. Dr. Osler does not mention that in the Province of Ontario the homœopaths have a certain number of representatives in the Board, and that homœopathic candidates, though conforming in all respects to the full requirements, are examined in therapeutics and medicine by special examiners We understand, however, that the effect of the strict regulations has been that, on an average, not more than one homœopath has annually presented himself at the Board. In the Province of Quebec, we believe, there is a special Homœopathic Board which, as candidates are so few, is rarely, if ever, called together.

That eleven schools of medicine are more than enough for a country like Canada, with a limited and scattered population, seems very evident, though the ratio to population is not so high as in the United States. The folly of so many schools becomes apparent when the financial basis is exposed. The true note is struck in urging the friends of higher medical education to assist in placing the schools in a position in which they will not be dependent entirely upon the fees of the students. Benefactions are coming at last in the direction of the medical colleges, and the example set by the citizens of Montreal in subscribing for an endowment of McGill Medical Faculty, and the munificent gift of Mr. Vanderbilt to the College of Physicians and Surgeons of New York, will not be without influence in other cities.

AN HISTORICAL INSTANCE OF ALLEGED LATE MENSTRUATION.

PROBABLY there is no more striking illustration of the truth that a man is incapable of judging alleged facts belonging to a department of knowledge which he has never studied, than was given by Gibbon in regard to the death of Asima, the mother of Abdallah. The statement referred to is found in a note to the fifty-sixth chapter of the *Decline and Fall of the Roman Empire*. Abdallah had for months successfully sustained the siege of Mecca, but was finally compelled to yield, the city was taken, and he was slain. The tidings of his death were borne to Asima, and Gibbon states as a "physical effect of her grief for his death, the return at the age of ninety, and fatal consequences of her *menses*." The authority from whom Gibbon seems to have derived this remarkable statement was D'Herbelot; and, upon referring to his great work, *Bibliothèque Orientale*, 1777, we find this author not only asserts the return of menstruation in Asima in consequence of the profound emotion caused by her son's death, but that the flow proved fatal in five days.

Now a knowledge of human physiology would have saved Gibbon from accepting as a fact so marked a violation of physiological law. Such a flow as occurred in Asima's case was in no proper sense to be set down as menstruation—the very fact of its proving fatal would be an obvious objection, apart from any other, to accepting such view.

If so learned a man as Gibbon, one so little disposed to be credulous that he often leaned to incredulity, could repeat that which every intelligent physician would reject, it is not astonishing that the ignorant will accept the most absurd statements in regard to medical matters, and are o frequently made the prey of designing quacks. The narrative too, has a wider application, as indicated at the beginning of the note.

SOCIETY PROCEEDINGS.

MEDICAL SOCIETY OF VIRGINIA.

Sixteenth Annual Session, held at Alleghany Springs, Montgomery Co., Sept. 15, 16, and 17, 1885.

TUESDAY, SEPTEMBER 15TH.—FIRST DAY.

THE meeting was called to order at 8 P. M. by Dr. Bedford Brown, a railroad accident having prevented the President, Dr. S. K. Jackson, from arriving in time.

Dr. H. M. Clarkson, of Haymarket, delivered the annual address to the public and profession, taking for his subject, *Medical Societies: their Relations to the Public*.

DR. ISAAC WHITE, of Alleghany Springs, Resident Physician of the place, read a paper under the title of

MEDICINAL PROPERTIES OF ALLEGHANY SPRINGS WATERS.

The first portion of his paper referred to the geological formation of the framework of the Springs and surrounding country. The immediate vicinity consists (geologically) of magnesium, limestone, and argillaceous slates; while in the near neighborhood ore deposits are to be found—silver, iron, lead, and zinc. The temperature of the Springs stands about 56° Fahr.; the specific gravity at 1002.83; the taste of the water is saline, with an extremely faint but usually perceptible acid reaction. He gave the analysis, and stated that the effects of the baryta and strontia therein contained were in a measure similar to those of arsenic. He made this explanation because it was so common for him to be asked whether the Springs do not contain arsenic as a component part. He believed fully in the great value of Alleghany Springs water, but was by no means one of those enthusiasts who deem the one Springs they have faith in to

be a "cure all." Such claims being frequently put forth in relation to generally good Springs, often destroy belief that they are of any value whatever, in the minds of intelligent people. His great faith in the value of the water of these Springs was due to years of careful examination and experiment, and he felt that in certain forms of dyspepsia there is no natural water to be compared with it. The practical range of value of the water generally, beyond its special value just mentioned, is both great and extensive, and its uses should be made more widely known. The magnesian salts are undoubtedly a source of great power in these waters. When first drunk, a temporary, strange, giddy feeling in the head often occurs, soon followed by headache. He has seen erythema, eczema, and even boils, follow its use. The dose is a glassful, gradually increased to two teacupfuls before each meal, according as the intention is to get its tonic, diuretic, or cathartic effect.

DR. WM. C. DABNEY, of Charlottesville, as President, read the

REPORT OF THE STATE BOARD OF MEDICAL EXAMINERS,

showing that thirty-two candidates have passed satisfactory examinations since January 1, 1885, and have been licensed to practise in Virginia; six have been rejected. All of the candidates were college graduates.

WEDNESDAY, SEPTEMBER 16TH.—SECOND DAY.

MORNING SESSION.

THE PRESIDENT, DR. S. K. JACKSON, of Norfolk, delivered the

PRESIDENT'S ADDRESS.

He looked upon his elevation to the highest office in the gift of the Virginia profession as an expression of appreciation of his work to interest the Society in zymotic diseases, with special reference to prophylaxis. He first considered the hindrances to a rapid progress of the science of medicine; he then considered the most important factors in its recent high development; and, lastly, the most efficient agencies to invoke in order to secure its continued growth. The address was mostly of State interest.

The subject for general discussion,

SCARLET FEVER,

was opened by a full paper by DR. THOMAS J. MOORE, of Richmond. He adopted the usual divisions, such as scarlatina simplex, scarlatina anginosa, and scarlatina maligna. He gave graphic descriptions of each form, and traced the history of the disease from its earliest mention down to the present day. He discussed the origin of the fever, and laid much stress upon the germ theory. The success in cultivating and inoculating the special microbes of charbon, chicken cholera, murrain, and other diseases in the lower animals, with modification of symptoms and abatement in the severity of the respective diseases were described, and the hope expressed that corresponding advances in human *parasitology* may follow close in their wake. He stated that up to this time the only germ that has filled all the necessary requirements, as found in man through inoculation and otherwise, is the spiro bacterium of relapsing fever found by Obermeier, and called after him. The parallelism between smallpox and charbon was spoken of, travelling, however, in contrary directions; the one from man to the lower animals, the other from the domestic animals to man; the special bacillus of the latter had been discovered; through cultivation and inoculation it fulfilled all that the law required of it. Like vaccination in smallpox, it produced, through inoculation of a remote culture from the virus of one of the lower animals immunity in the human family. The peculiar microbe producing the former has not yet been determined. He hoped that it would come to light at a day not distant. Continuing, he stated there are two microbes described as giving origin to scarlatina, the monas scarlatinosum of Klebs, the plax scindens of Eklund, of Stockholm. Each is ingeniously and plausibly put forward as the true bacillus. Klebs does not indulge in the enthusiasm peculiar to confidence, while Eklund endeavors to demonstate the absolutism of his proposition.

Dr. Moore declared that he did not believe that the special microbe producing this disease had yet been recognized, and the question, to say the least of it, was undetermined and open. The part of the address in regard to treatment was long and exhaustive. He carefully discussed the merits of belladonna, cited the opinions of the homœopaths who had introduced it in this disease, as carrying out the very essence of their doctrine, with that of the regulars who had partially or completely accepted it. Dr. Moore does not think belladonna possesses prophylactic powers, and declared it to be an indifferent drug when used to mitigate symptoms during the progress of the disease. For the reduction of temperature he preferred the ice cap to the head, rubber bag over the front of the neck and covering the great vessels, conjoined with sponging. Failing in this, he uses the wet sheet, then the cold pack, and, as a last resort, the cold bath, as described by Ziemssen. He never fears the depressing effects of cold water, as patients can always be relieved from impending congestion by free resort to alcoholic stimulation. His favorite internal antipyretic up to this time was quinine, administered by rectum or hypodermatically, where the stomach was irritable. He hoped much from resorcin, and urged his brethren to try it, and give their clinical experience to the world; the drug is safe, certain in action, a germ destroyer. As an unguent, especially where itching and burning are prominent symptoms, he knows nothing equal to a combination of glycerine, borax, and carbolic acid, in the proportion of ℥, ʒ, and 15 gtt., respectively; both the borax and acid obtund nervous sensibility. He commended the use of unguents generally; they calm the patient and reduce temperature. He recommended sprays as the most efficacious manner of applying internal medication to the throat, and called especial attention to the value of hydrate of chloral, 2 to 4 grains to the ounce, as invaluable for its antiseptic and anodyne powers. This drug is likewise invaluable, he declared, in convulsions happening in children. It is best administered per rectum. Dr. Moore recommended the use of small doses of mercury for a few days as an adjuvant to diuresis in the dropsy attending acute desquamative nephritis, where diuretics were not accomplishing the desired end. Failing in these, a resort to hydragogue cathartics is indispensable. Jaborandi he had not tried in this fever; he feared its depressing effects; the physiological action of the drug is easy to induce, but diffi-

cult to leave off when desired. Nutritious food from the commencement of an attack, and free stimulation in all cases where the vital powers are depressed, he regarded as indispensable.

THE AFTERNOON SESSION

was devoted to the

ELECTION OF OFFICERS,

etc., with the following result:

President.—Dr. Rawley W. Martin, of Chatham.

Vice-Presidents.—Drs. John S. Apperson, of Town House; T. B. Greer, of Rocky Mount; and H. M. D. Martin, of Fredericksburg.

Recording Secretary.—Dr. Landon B. Edwards, of Richmond.

Corresponding Secretary.—Dr. John F. Winn, of Richmond.

Treasurer.—Dr. R. T. Styll, of Richmond.

Dr. Hugh T. Nelson to deliver address to public and profession, 1886.

Place of next meeting.—Fredericksburg.

EVENING SESSION.

DR. BEDFORD BROWN, of Alexandria, read a paper on

SCARLET FEVER,

in continuation of the morning's discussion. He has seen malignant cases with cold extremities and tongue, with a body temperature of 107°. He uses

℞.—Acid. salicylat.	ʒij.
Tinct. aconit. radicis . . .	gtt. xij.
Infus. digitalis	℥iss.
Spts. ammon. aromat. . . .	ʒiij.
Syrup. aurant. cort. . . .	℥ss.
Aquæ	℥j.—M.

S. Teaspoonful for a child five years old every three hours.

This combination reduces fever more decidedly than any other antipyretic he has used; it acts also as a diaphoretic and diuretic. A tepid bath or a wet pack increases its action. Alcoholic stimulants benefit malignant cases tending to collapse and coma, and also cases, on the other hand, having high fever, rapid pulse, and extreme restlessness. Such agents also generally arrest adenitis. In dangerous cases, frequent baths are too exhaustive. When extensive suppuration and pyæmia threaten, muriated tincture of iron, Fowler's solution, and quinia sulphate act well. To arrest acute nephritis and renal dropsy, envelop the body with a flaxseed meal poultice, covered with oil silk. When the kidneys are engorged, the urine bloody, with dropsy of the chest and abdomen, a full dose of calomel, followed by compound powder of jalap will often do good. Such cases bear purgation. But if the renal dropsy is attended with cool skin, great pallor, feeble pulse, and great prostration, then frequent purging is not well borne. In such cases, use lumbar poultices, digitalis, acetate of potash with occasional saline cathartics. A morbid element in scarlatina often develops rheumatism; hence the frequent cardiac complications. When these occur, resort to the active agents named in the above prescription. Alkalies and salines should be used for renal complications. Dr. Brown has been disappointed in the diaphoretic action of pilocarpin. Potassium iodide is often useful in nephritic sequelæ of scarlet fever.

DR. R. I. HICKS, of Casanova, has never seen anything indicating relationship between scarlet fever and diphtheria, nor has he seen scarlatinal sore throat threaten life. Mopping the throat, or gargling hot water will relieve the faucial troubles. He thinks the best treatment of scarlet fever consists in cold sponging the body, and the use of quinine and small doses of carbolate of iodine internally. Everything about the patient should be kept clean, and a current of fresh air should be kept up about the bed. Pull the bed out in the middle of the room—away from the corners—and keep the windows open. When the weather is very cold, use open fireplace rooms. Malignancy depends upon bad sanitation. Zymotic germs do not live in pure air. Filth breeds them. Soda salicylate irritates the stomach too much, and corrosive sublimate, in doses large enough to kill germs, will kill the patient.

DR. ALEX. HARRIS, of Jeffersonton, emphasized the benefit (1) of isolation, both to prevent and to cure scarlet fever; (2) sick-rooms with open fireplaces; (3) the bed should be out from any corner of the room, and draughts of fresh air should be made to keep the room ventilated; (4) the patient's and the bedclothing should be changed daily; (5) the popular disinfectants are not useful in permissible doses. Fire and water above 212° F. are the best germicides. Hence, burn or boil all clothing that has been about the patient; (6) always disinfect a house in which a zymotic disease has been treated, if even a year or two previously. Pour boiling water over the floors, in the cracks, on the wall, etc. Steam would be better.

DR. C. T. LEWIS, of Clifton Forge, believes in the stimulating plan of treatment, and thinks digitalis helps to relieve the swelling of the throat. Sometimes he uses chlorate of potash and muriated tincture of iron. He is a strong advocate of such sanitary measures as Drs. Hicks and Harris have just mentioned. He feeds liberally.

DR. JOHN F. WINN, of Richmond, agreed with the speakers as to their sanitary recommendations. He thinks, in towns especially, placards should be placed on doors of infected houses as warnings to visitors. Public funerals in all cases of death by zymotic disease should be prohibited by law. In the sick-room, use old cloths, etc., which may be burned up. The popular "disinfectant solution" of copperas is not a disinfectant, but is antiseptic. Four ounces of chloride of lime dissolved in a gallon of water is a good preparation to pour over the evacuations of typhoid patients. Corrosive sublimate in solution is also used. Let all articles that are to be used again be kept immersed in one or the other of these solutions for several hours. To disinfect a room, burn in it from two to four pounds of sulphur, and keep doors closed. If the body after death is to be removed, it should be kept wrapped in cloths wet with Labarraque's solution—℥iv to the gallon.

DR. L. LANKFORD, of Bowers, Va., agreed with the speakers as to the importance of fresh air in the treatment of scarlet fever, and thinks that malignancy would be rare if this were insisted on more than it is. As an illustration, he mentioned the cases of two of his children. The younger was kept downstairs in a warm

room with the doors closed, and malignancy developed; the other child was kept upstairs, where there was no fire and where a window was kept open, and no malignant sign or symptom developed. The weather was cold.

DR. J. HERBERT CLAIBORNE, of Petersburg, spoke of a case in his practice in which the dermic inflammation was so intense that, on the third day, the skin came off in large patches all over the body. Some children played day after day in the room with the patient, and yet none of them contracted the disease. Shortly afterward some other children had the fever so mildly that they could not be retained in the house; but in a short while, the disease developed in some of their playmates. An old lady living in the house with these mild cases had scarlet fever so severely that she came near dying. To disinfect a sick-room, not only the organic germs must be destroyed, but the spores also. A solution of corrosive sublimate (1:1000) is required to kill the spores, or water at 280°. But the best disinfectant for a sick-room after all is pure, fresh air. The doors and windows should be left open. Of course, always disinfect articles of clothing, etc. He thinks Squibb's solution of chlorinated soda—℥ij to the gallon of water—is the most efficient insecticide in the market, and it is cheap enough to be within reach of all.

DR. WM. L. ROBINSON, of Danville, believes a great deal of good results from proper medicinal treatment. He brings down the fever by using a full bath at 95°, which he allows to cool down to 85° while the patient is in it. Before taking him out of the bath, give a weak toddy and rub the body over with camphorated oil before he is put to bed. He depends very much upon the free use of lithia water as a drink. If the nose gets stopped up, so as to compel mouth bleeding, the child often wakes up from cat naps screaming. For this condition he uses a solution of two grains of chloral hydrate in an ounce of water with the steam atomizer. This keeps the nose moist. Large doses of calomel and jalap should be used if kidney complications threaten. In one case of œdema of the lungs, the hypodermatic use of pilocarpin cured the patient.

DR. W. W. PARKER, of Richmond, has often been disheartened at the results of treatment. Many cases get well without any special treatment, but until recently he did not get good results under any plan. Now, however, he has better results. The best remedy for malignant scarlet fever is alcohol in free doses. He keeps his patients hot. He got the suggestion from the good effects of alcohol in typhoid fever. Applications of turpentine are as good for the sore throat as carbolic acid. Keep the child in the house; in summer, about ten days; in winter, wait about three or four weeks.

DR. M. A. WILSON, of New River Depot, has used, with great satisfaction, Bartholow's tincture of belladonna prescription to antagonize that condition of the throat which causes exudation.

DR. HUGH T. NELSON, of Charlottesville, said patients often succumb to accumulations of heat around the nerve centres; hence the necessity for diaphoretics and heart stimulants. After these, use tonics.

Dr. S. K. Jackson, of Norfolk; Dr. Robert S. Lewis, of Culpepper; Dr. Wm. L. Broaddus, of Newtown; Dr. John Grammer, of Halifax Court House; and Dr. W. D. Cooper, of Morrisville, all spoke in the highest terms of praise of Watson's chlorine treatment, as described in his work on *Practice of Physic*.

DR. M. G. ELLZEY, of Washington, D. C., then presented his report on

CHEMISTRY, MATERIA MEDICA, AND THERAPEUTICS.

In reference to the advances made during the past year in materia medica and therapeutics, he thought all interest centred around antipyrin and cocaine—the two drugs most frequently mentioned by professional writers in the last twelve months. He thought the former had not realized the great hope induced at its introduction, namely, that we had a safe and reliable antipyretic. It had not only in frequent instances reduced the temperature of the sick body without changing in any manner the force of the fever illness, but its administration had at times been attended with alarming results to the patient. Its value had proved by no means as great as was at first announced, and its true place in our armamentarium can hardly yet be assigned. Cocaine has proved of wonderful power in some directions, but is not the general mucous anæsthetic that is claimed for it by a few enthusiasts. Dr. Ellzey is fully of the opinion that protective inoculation by attenuated choleraic virus is by no means operative. He shares the general opinion that the subject is one hardly worthy of discussion. He thinks Dr. Sternberg's researches are of more than ordinary value to the profession, and advised all physicians interested in the "germ theory" to follow up his studies. He advised more thorough study of the climatological peculiarities of Appalachian Virginia by the practitioners of the State. He thought that region a vast summer sanitarium.

DR. SMELT W. DICKINSON, of Marion, read the

REPORT ON ADVANCES IN OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Antiseptic midwifery, he said, has undoubtedly saved many lives. But some of the antiseptic practices of a year ago have been done away with as being either useless or harmful—such, for instance, as routine vaginal and intrauterine injections after labor. Mercuric bichloride is dangerous in such injections; especially is it to be omitted when there is nephritis. Lying-in rooms should be aseptic, and whatever is to go into the vagina—such as hands, sponges, instruments—should be made scrupulously clean. Among other prophylactic methods, Cushing's was described. Thoroughly bathe the parts and then douche the vagina before delivery with weak solutions of corrosive sublimate, and after delivery of the placenta, wash out the uterus with a like solution. The doctor's and the nurse's hands should be kept aseptic all the time.

Post-partum drainage is readily effected by letting the patient sit upon the night-vessel when she wishes to urinate, etc., provided, of course, her condition otherwise permits it.

The contagium of puerperal fever must be of a material character, capable of being either destroyed or washed away by antiseptic injections. If body temperature rises materially above 100° after labor, with no other cause, and the discharges become offensive, use antiseptic washes at once. A doctor may return to his general practice after he has thoroughly used antiseptic washes and other precautions.

Extrauterine pregnancy is now treated by killing the fœtus by electricity and then by laparotomy.

Combined version in placenta prævia is done thus: Tampon the vagina until made sufficiently dilatable. Then anæsthetize the patient and remove the tampon. Introduce the hand and carry two fingers through the presenting placenta, and draw the fœtus to one side, while the other hand on the abdomen presses so as to carry the buttocks down until a foot can be reached. Draw the foot through the cervix so that the breech may act as a tampon on the lower segment of the uterus. Then wait for the spontaneous expulsion of the child, or for sufficient dilatability of the cervix to permit delivery.

Dr. Christopher Tompkins, of Richmond, in the treatment of the cord, recommends that it be drawn between the fingers until some of the gelatinous matter is expressed, and then tie as usual, except to apply a third ligature near the one left on the umbilical end of the cord. Credé and Weber prefer absorbent cotton as a dressing for the cord, to prevent umbilical inflammation.

Abortion is approved when dangerous conditions call for it. The lying-in room should have a regulated temperature. Swinging as a substitute for artificial respiration is urged by some.

Of diseases of women, neurasthenia is the most prominent. Nervous disease is often mistaken for uterine disease. According to Mitchell, neurasthenia is generally associated with anæmia, and is chiefly reflex in its manifestations. Rest, massage, electricity, and forced feeding are the essentials of treatment.

Lacerations of the cervix uteri will usually heal of themselves if blood poisoning is prevented. If operation should be required, relieve the cellulitis first.

Alexander's operation for backward uterine displacements consists in cutting down to the external inguinal ring, gathering up the ends of the round ligaments, and drawing them sufficiently out to replace the womb to its proper position. Then stitch the ligaments to the edge of the ring and cut off about an inch of the end. Drawing too much on the ligament has caused death. Wear a suitable pessary for two months. Prolapse of both ovaries into Douglas's cul-de-sac, with consequent sterility, may be cured by this operation.

Dr. Goodell advises rapid dilatation of the cervix for dysmenorrhœa instead of incision, especially for organic dysmenorrhœa, and also for nervous dysmenorrhœa.

In diseases of children, the use of large doses of carbonate of ammonia for scarlet fever is gaining favor. Dr. R. D. Huffard, of Smythe Co., uses the carbonate later in the disease, when the capillary circulation is languid. Bismuth subnitrate is good for the sore tongue, which usually occurs about the fifth day, as it is, also, in cancrum oris. Trypsin is a solvent for diphtheritic membrane when used as a spray every fifteen minutes or so, if the patient's strength will allow. Avoid chlorate of potash in febrile affections where the blood is alkaline, as in diphtheria, nephritic diseases with scanty urine, uræmia, etc. Icterus neonatorum is said to be due to incomplete closure of the ductus venosus. Dr. Hartigan, of Washington, D. C., supports Sims's theory as to the cause of trismus nascentium being "an inward displacement of the occipital bone."

(To be concluded.)

AMERICAN GYNECOLOGICAL SOCIETY.

Tenth Annual Meeting held at Washington, September 22, 23, and 24, 1885.

(Specially reported for THE MEDICAL NEWS.)

TUESDAY, SEPTEMBER 22D.—FIRST DAY. MORNING SESSION.

THE Society was called to order at 10 o'clock, in the Lecture Room of the Columbian University by the PRESIDENT, WILLIAM T. HOWARD, M.D., of Baltimore.

DR. SAMUEL C. BUSEY, of Washington, delivered the following

ADDRESS OF WELCOME.

Mr. President and Fellows: I offer you the greetings of fellowship and bid you welcome guests of the Washington Obstetrical and Gynecological Society. The acceptance of the invitation to hold your tenth annual meeting in this city, and your presence here to-day, confer a distinguished honor upon our young society, now just completing its third year of existence, and affords an opportunity for its members to meet and make the acquaintance of men who by their brilliant achievements in the sciences of obstetrics and gynecology have won world-wide reputations, and added lustre and renown to American medicine.

We extend to you the hospitalities of fraternity, and, by our presence at this opening session, attest our professional regard and obedience to parental precept and authority.

It is a special gratification to know that the youngest of your natural offspring will enjoy the honor of commemorative union on this tenth anniversary of a society which, in the past decade, has contributed so much to the advancement of obstetrics and gynecology, and to the cure and alleviation of the afflictions of women.

On the roster of Fellowship the names of Atlee, Buckingham, Peaslee, Sims, Trask, White, and Wallace are marked with the asterisk of death. Others have come to fill the places of the lamented dead, and the future gives promise of even greater progress and higher excellence in the aims of conscientious and scientific medicine.

Then, here, at the Nation's capital, on this auspicious occasion, in the unity of a common purpose, let us join with you in that faith and devotion to duty which have been crowned with such marvellous success and rich rewards. You must lead; we will follow. And, when you have completed the labors of the present meeting, and the new and renewed friendships shall be interrupted by your return to the scenes of your daily work, if our gratitude as pupils shall be the measure of your pleasure as instructors, your second advent will not await the expiration of another decade.

DR. BUSEY then read a paper on

THE NATURAL HYGIENE OF CHILDBEARING LIFE.

Precocious nubility is the congener of precocious puberty. The latter is popularized as the sign of the former as the complement of maturity, whereas, in fact, one is the symptom and the other supplies proof of immaturity. Conjointly they represent the premature evolution of a function in an organism unfitted for its fruition. It is a law of the animal kingdom that pre-

mature reproduction arrests the growth of the body and diminishes functional energy; so, likewise, in the vegetable kingdom, premature fruiting injures development and impairs future productiveness. It is not, however, necessary to appeal to analogies found among the lower order of animals and in vegetable life for proof of the detrimental effects of the too early use of the faculty of productivity. Nor does its premature establishment necessarily imply that precocious matrimony will determine its maturity. Puberty must precede and marriage should succeed nubility. The order of succession is fixed, but wedlock should conform to the law which prescribes the period of greatest fecundity with the least mortality and greatest survival of children as the fitting time.

Precocious matrimony is, then, the sequel of precocious puberty, and, if it entails harm, the root of the evil must find its radical in too early puberty. In this country, and in the higher walks of life, the ratio of precocious puberty is manifestly on the increase. Whether equally so among the middle and lower classes is not known. If there is a like increasing ratio among the same class in other countries, the cause or causes might be more easily ascertained. But in some countries the hindrance of an advanced age of majority and the requirement of parental assent restrain precocious matrimony; consequently the evil tendencies and effects of such increasing ratio are less prevalently diffused.

The complex phenomena of precocity refer to erethism of those nerve-centres which preside over the brain and reproductive faculties. The predominance acquired by these vital activities subordinates those of the ganglionic system, and impairs nutrition. Overuse and disuse of faculty and organ, if not equally potent, are commensurate causes of disturbance. Exaltation of the cerebral and generative capacities involve corresponding deterioration of formative energy. This sovereignty of special attributes is more often traceable to external and extraneous stimuli than to heredity and defect of organization. Heredity is undoubtedly a prevalent factor. As runs the legend, one generation accumulates a fortune, the second divides, and the third squanders it. So one generation inaugurates the artificial methods of premature culture, the second intensifies the refinement of intellectual possibilities and emotional display, and the third explodes in caricature extravagances. The young, highly organized, and vascular brain-structure is stimulated by over- and too constant work. Repose and rest are sacrificed to baneful amusement and harmful entertainment. Early to bed and early to rise is the law of natural life, now becoming obsolete. One or more of the special senses are strained to the utmost attainment of mature development. The emotional excesses are displayed as esthetic accomplishments. The passions and impulses are cultivated by indulgences. The whims and caprices are gratified either by acquiescence or evasive suggestion of reprehensible expedients. The body, stilted on elevated heels, is geared from foot to crown into unnatural posture and ungainly carriage. Vital capacity is limited to the expansion of closely fitting corsets, and the figure is made to conform to the style of fashionable dressing. All these and many other practices are diligently taught to crown the adoration of parents.

DR. CHADWICK, of Boston, said that he had made a few investigations in regard to the early appearance of menstruation with reference to women of various nationalities in this country. In the examination of over 4000 cases it was found that American women menstruated earlier than women of other nationalities examined. Furthermore, American women of American parentage begin to menstruate earlier than American women of foreign parentage. Scarcely enough observations, in reference to the menopause, have been made to justify absolute conclusions, but he found to his surprise that the period of the menopause is appearing later in American women than in the foreign-born women in this country. If this is corroborated, the conclusion would be that the childbearing period is greater in American women than in women of other countries. The fact that the childbearing period is increased both at the beginning and the end, we should take as an indication of added vigor. There is no question of the fact that the number of children to a family is diminishing, but this can be accounted for by social influences, and is common to all civilized communities.

DR. JOHN P. REYNOLDS, of Boston, agreed entirely with this statement, and he believed that in the community in which he lives the women of the upper and middle classes menstruate earlier than they did twenty-five years ago. He believed that this indicates an activity of function which will prolong it beyond the average period of gestation.

A point of interest is in reference to the diminution of sexual power. He questioned whether this is not more dependent on individuality than on sex. He thought it doubtful that women pass the period for the relation of marriage and of childbearing sooner than men pass the period of procreation. This is, however, a most perplexing and obscure question.

DR. HENRY J. GARRIGUES, of New York, then read a paper on

PUERPERAL DIPHTHERIA.

This is a disease not referred to in the majority of text-books. It is one of the forms of puerperal fever, or rather one of the different diseases included under that term. It is distinguished by the appearance of diphtheritic exudation somewhere in the genital tract of the puerperal woman. It is accompanied by well-marked general symptoms, imperils life, and calls for active treatment. The paper was based upon 27 cases treated in hospital practice, and two cases occurring in private practice.

The characteristic feature of the disease is the diphtheritic infiltration, which is usually of light pearl-gray color. Generally appearing in small spots and coalescing or extending by involving new areas, the exudation is firmly adherent to and embedded in the underlying tissue. It is most marked at the points where the canal becomes narrow. This may be explained by the more frequent occurrence of lacerations at this point. The posterior wall of the vagina is more commonly attacked than the anterior wall, which is probably due to the fact that it is bathed with the discharges from the uterus. The exudation may, however, appear on entirely healthy portions of mucous membrane, which have not been the seat of laceration. The surrounding parts are more or less swollen. The connective tissue of the pelvis is infiltrated with serous fluid and is sometimes the seat of ecchymoses. The skin is sometimes the seat of

a dusky erythema, consisting of minute spots, disappearing on pressure and not elevated. In one case petechiæ as large as hemp-seed existed. These were not affected by pressure. The same patient later developed erysipelas.

In five cases ending fatally, autopsies were made. The uterus was much enlarged, sometimes reaching almost to the umbilicus two weeks after labor.

The cervix may be torn, showing diphtheritic patches or a thin gray film. In two cases, large portions of the cervix sloughed and the vagina became gangrenous. The tissue of the uterus is friable and may be almost diffluent. The diphtheritic exudation may affect the Fallopian tubes. In some cases the muscular tissue of the uterus is scooped out as in dissecting typhus, of which he had described several cases. This occurred in four of the cases of puerperal diphtheria. In one case the mass thrown off was four inches long, two inches wide, and one inch thick. These masses have a pear-shape, their outer surface is of a gray color, the inner surface flesh color. They are perforated with a number of holes leading into uterine sinuses. Under the microscope these masses are shown to consist of smooth muscular fibre in a more or less advanced state of fatty degeneration. The connective tissue is increased. Lesions are also found in other organs and occasionally in the joints.

Difficult labors and a previous weakened condition of the patient predispose to the development of the condition. The real cause of the disease is, however, an infection from the outside. Dr. Garrigues had never been able to convince himself that the poison passes from one patient to another, but it seems to be in the air of the ward. When a ward had been fumigated with sulphurous acid there would not be a seriously sick patient for weeks. That the poison comes from the outside is also shown by the fact, that when the prophylactic treatment to which he would refer is employed, the disease does not develop.

The first symptom which shows a deviation from a normal course is usually the occurrence of fever, which mostly appears from two to four days after delivery. Sometimes there will be a chill or chilly feelings. The temperature rises gradually as a rule. It has ranged from 100.6° to 107°, the average being from 102° to 104°. Anorexia, vomiting, coated tongue, and diarrhœa indicate disturbance of the gastro-intestinal canal. The patient complains of pain in the epigastrium and one or both groins, sometimes extending into the legs. Examination shows the uterus larger than it should be and quite tender. Tenderness is often also found in the groins and some swelling may also be observed. The lochial discharge is often scanty and offensive, but in some cases it has been normal. In those cases in which there was expulsion of the tissues of the uterus, there has been a purulent discharge until expulsion has been accomplished. The diphtheritic patch commonly appears from three to seven days after delivery. It continues to spread for several days, and usually stops in from three to eight days after the beginning of treatment. In one case the diphtheritic patches also appeared on the tongue, indicating that the disease is identical with the ordinary form of diphtheria attacking the throat. The irritation of the nervous system is evidenced by headache, stupor, and delirium. There is alteration of the renal secretion, and sometimes there is painful micturition. Three patients had albuminuria. In two cases jaundice bore testimony to the perverted condition of the blood. The sweet breath and profuse sweats of septicæmia were observed twice. One patient developed painful arthritis of the elbow-joint. When once the diphtheritic process is arrested, the patients recover rapidly.

There is scarcely any difficulty in the diagnosis. When the injections of bichloride of mercury are employed, they cause a yellow discoloration of abraded surfaces. This is strictly limited to the abraded surface, and is unaccompanied with general symptoms. When the chloride of zinc is applied to the affected surface in the treatment of the disease, a slough is caused having the color of the deposit, and the physician is sometimes at a loss to determine whether or not the disease is spreading. The point is decided by noting where the application is made and by observing the edge of the deposit. The diphtheritic deposit has a scalloped outline, while the outline of the slough is smooth.

As to prognosis, five out of twenty-nine cases died, giving a mortality of 17.2 per cent. Another of the cases might have survived, for she lived thirty-two days and died from rupture of the uterus while an assistant was using an intrauterine injection. The post-mortem showed the walls of the uterus to be extremely thin. The duration of the cases ending in recovery is usually about two weeks. In those cases in which a portion of the uterus is scooped out, the organ is left in a weakened condition, which in future pregnancies may predispose to rupture of the uterus.

In the way of prophylaxis, it is recommended to limit the vaginal examinations during labor as much as possible. The finger or hand should not be introduced into the uterus unless absolutely necessary. The delivery should be so accomplished as to avoid as much as possible wounding of the genital canal. Instruments should be used with care. The most important element in the prophylaxis is the use of bichloride of mercury as an antiseptic. Everything coming in contact with the patient should be washed in the solution of corrosive sublimate, 1 : 2000. After this treatment was introduced only one case appeared in six months, and that was due to carelessness on the part of an attendant, who delivered the woman immediately after removing a macerated fœtus from another patient.

After the disease appears the treatment must be energetic. The only treatment that has given me satisfaction is that with chloride of zinc. The affected parts are touched with a solution consisting of equal parts of chloride of zinc and distilled water. This is rather painful and an anæsthetic may be used. A warm solution of corrosive sublimate, one to two thousand, is used for intrauterine injection where this is required, and subsequently a suppository of fifteen grains of iodoform is introduced. If this is done, the process need not be repeated more than once in the twenty-four hours. The vagina is to be touched every three hours. The parts should be examined every day, and if the process is not arrested, the chloride of zinc is to be repeated. If the disease is limited to the vagina and vulva, the intrauterine treatment is omitted. Extract of ergot is also given with the hope of causing contraction of the uterus. Morphia, quinia, and digitalis are used as indicated.

High temperature is combated with sponge bathing, salicylic acid, and, if necessary, the rubber coil and ice-water. Carbolic acid is also given, sometimes combined with the compound tincture of iodine. If the temperature is not very high, warm poultices are preferred to the ice-bag and coil. Where there is diarrhœa, warm poultices are also considered preferable.

Samples of the occlusion bandage to be used after labor were exhibited. They consisted of a pad of absorbent cotton wet with corrosive sublimate solution, over this a piece of oiled muslin or rubber cloth, and over all another piece of absorbent cotton and a piece of muslin or flannel, to attach it to the binder.

DR. W. T. LUSK, of New York, said that ten years ago he had one hundred and fifty cases of this affection under his care. Of this number twenty-eight died. The epidemic could be traced to a patient brought into the hospital after a long labor. She was suffering at the time from syphilitic ulcers of the vulva, which was excessively inflamed. He extracted the child with forceps and the inflamed perineum tore. Soon after this the diphtheritic deposit appeared, and the whole ward was infected. . The first cases were the result of transference from the patient, for the question of contagion was not recognized as it is now. After a time, great care was taken to avoid every possible source of contact, but the disease continued and could only be explained on the supposition that the air of the ward was filled with germs. In his first cases, the treatment consisted in the application of equal parts of the solution of the persulphate of iron and compound tincture of iodine. The disease usually began with a certain degree of mildness and gradually became more severe. Of the first twelve cases only two died, while in the second set of twelve cases only two recovered. In the progress of the epidemic, the entire system seemed to be affected, even before the advent of labor. Since the adoption of Dr. Garrigue's suggestion, with reference to the use of corrosive sublimate injections, he had not seen a case of puerperal diphtheria in the course of three and a half years. He had neither had a death from fever, nor any cases of fever, the old-fashioned milk fevers even being absent.

DR. H. P. C. WILSON, of Baltimore, had always been averse to using bandages of any kind after delivery, preferring to have the napkins placed under the patient so as not to obstruct the free flow of the discharge, and to use frequent washings of the vagina with antiseptic solutions.

DR. WM. L. RICHARDSON, of Boston, said that during 1882 and 1883, he spent most of his time in fighting this puerperal fever with ill-success, until the appearance of Dr. Garrigues's paper. After adopting the use of the pad and the corrosive sublimate solution for the hands of the attendants and nurses, the hospital has been almost entirely free from the disease. There has been no death since these measures were adopted, and there have been only one or two cases which caused anxiety. He agreed entirely with what the reader of the paper had said. In regard to the use of the corrosive sublimate injections he has found that even so weak a solution as one to five thousand will sometimes cause salivation. Where he meets with this, he uses iodoform, as has been suggested.

DR. JOHN BYRNE, of Brooklyn, inquired of Dr. Garrigues whether he had noticed any vaginal deformity following this affection? He had seen one case in which such deformity occurred. A lady, after her fifth confinement, was taken with tenderness, fever, and so on, and on the fourteenth day had a copious hemorrhage. On examination he found the entire posterior and outer surface of the vagina almost completely detached. Acetic acid was applied, and the bleeding checked. An examination after the healing of the parts had taken place showed the vagina much shortened and narrowed in its upper part, the cervix being obliterated. The anterior portion of the cervix was in contact with the recto-vaginal septum. He told the patient, in reply to her inquiry, that it was not likely that she would conceive. His prediction turned out to be false. In the following confinement she was in labor twenty-four hours before there was the slightest appearance of an opening through which a fœtus could escape. There was bulging of the presenting portion of the uterus, and into this he made an incision, and the child was delivered readily, the patient making a rapid recovery.

DR. GARRIGUES thought that the endorsement of Drs. Lusk and Richardson would be sufficient to induce others to try the occlusion pads. During the year preceding the introduction of the new method of treatment the mortality was nearly seven per cent. During the next, with the new method of treatment, the mortality was one and a half per cent. During the second year it was less than three-fourths of one per cent. In the institution in which these observations were made there are a number of disturbing elements, one of the most important being its connection with a large general hospital. In this new method of treatment the antiseptics are applied only to the outside in normal cases. Only in abnormal cases are vaginal and intra-uterine injections employed. In reply to the objection of Dr. Wilson, he would say that the pads used are absorbent. In hospital practice the pad is changed every four hours; in private practice, three times a day is sufficient. He has never had salivation from the use of corrosive chloride. The nearest he has come to it has been fetid breath and diarrhœa. He has only seen two of the cases subsequently to recovery when in labor. In one there were great shortening and narrowing, but during pregnancy there was softening, and the labor was quite easy. The second patient is pregnant, and the vagina appears to be in good condition. In reply to a question, he stated that the use of pads prevents all offensive odor.

DR. H. P. C. WILSON asked Dr. Garrigues this question: Suppose a case of lacerated perineum, not sufficient to need sutures, in which serre-fines were used, would not the use of the pads interfere with the use of the serre-fines?

DR. GARRIGUES, in reply, said he thought not; the pads could be so adjusted as not to interfere. But in any event, if it did, he would dispense with the serre-fines and use the sutures, in preference to dispensing with the pads.

AFTERNOON SESSION.

DR. JOSEPH TABER JOHNSON, of Washington, reported

FOUR CASES OF OÖPHORECTOMY, WITH REMARKS.

Case I.—Miss M., had suffered severely from chronic oöphoritis and menstrual epilepsy. She was at this

time 29 years of age, and had suffered for fourteen years. There was constant pain in both ovaries, but most of the suffering was on the left side. For two weeks in every month she was under the care of an attendant, her education had been neglected, and she was in an almost inhuman condition. She had been under the care of skilful physicians, and almost everything had been tried. Oöphorectomy was, therefore, decided upon, and performed August 17, 1882. Both ovaries and one Fallopian tube were removed. For several months she had no periods and no spasms. Gradually her menses returned, and with them the convulsions in milder form. She is now menstruating with more regularity than before the operation.

Case II.—Miss W., aged 21, from being in affluence had been reduced to the necessity of earning her own living. Five years before coming under observation she took a severe cold at the monthly period. Since then she has suffered from chronic ovaritis. She also had leucorrhœa and a displaced uterus, for which she was treated without material benefit. He treated her for three months without benefit, and then removed the ovaries. She made a rapid recovery, and has since been free from pain.

Case III.—Miss S., aged 24, had been a great sufferer from dysmenorrhœa and reflex symptoms. She suffered with burning pain in the abdomen and head for ten days preceding menstruation. For several months there had been no flow, but the distressing symptoms continued. Both ovaries and tubes were removed. She made a rapid recovery, and continues healthy.

Case IV.—Mrs. —, aged 40, the mother of three children, had suffered with pain in the left ovary for twenty years. She had a lacerated cervix and perineum, which had been restored without improving the other symptoms. She had been under treatment for ten years, but was practically bedridden for three weeks out of every month. She wished to have the ovaries removed, but he advised her to wait five years longer, until the menopause would accomplish the same result. She, however, insisted on the operation, and he performed it last February. She did well for three days, when vomiting set in, and she died exhausted on the sixth day.

He then referred to the great importance of an early diagnosis in such cases in order that the operation might be performed before numerous adhesions had taken place and before the general condition had become so depressed, referring to the statistics of various operations in confirmation of his statements. He thought that many cases which are now lost from prolonged operations necessitated on account of the numerous adhesions, might be saved if there were means by which an early diagnosis could be made.

DR. R. S. SUTTON, of Pittsburg, said that we all admit that a woman with a cystic tumor of the ovary is doomed to death if the tumor is not removed; but when she is suffering from some disease of the ovary which does not give tangible evidence of its presence, the surgeon has often difficulty in deciding the question of operation. It may be that under ether and with bimanual palpation it is utterly impossible to detect any evidence of disease of the ovaries or tubes and yet the ovaries may be at the bottom of the trouble. Is the woman to be allowed to go on suffering because we cannot obtain evidence of disease that will justify an operation? It is better to give the woman the benefit of the doubt and open the abdomen and examine the organs. He did not believe that any one can tell the exact condition of the ovaries before opening the abdomen. It has now come to be the practice in obscure conditions in women for which no explanation can be found and in which it is probable that the ovaries or tubes are at fault, to make an exploratory operation. As a rule, exploratory operations are safe. He has yet to open the first abdomen and fail to find disease of the ovaries or tubes.

He removed both ovaries from a woman sent to him for operation for a lacerated cervix. There were symptoms which he could not refer to the condition of the cervix. On careful examination he found evidence of disease of the ovaries. He removed both ovaries. One contained a dermoid cyst, and the other had undergone cystic degeneration.

DR. W. H. BAKER, of Boston, said that this operation opens up a large field of usefulness to the gynecologist and of benefit to woman, but there is great danger of the pendulum swinging too far, and the operation be performed too frequently. He would not discourage the operation in properly selected cases. An operation which gives such brilliant results in properly selected cases is almost certain to be carried too far. The greater skill is shown in curing these patients without the removal of organs. We shall come to a better understanding as to when the operation should be performed, and when not, by studying the organ itself very carefully in those cases in which it has been removed. In all descriptions of the operation there should be an accompanying report of the microscopical examination.

The question of early diagnosis has been referred to, and this is a matter of the greatest importance. The ovaries and tubes are not the easiest organs to examine. Even where the ovaries are adherent to surrounding tissues, it is often extremely difficult to ascertain this fact, and exploratory operation may be the only way to determine the condition. Where exploratory incision has been made, and the organs found healthy so far as their gross appearance is concerned, he said that they should be put back and the abdomen closed, even if the woman suffers excruciating pain with the menstruation. He believed, if the same perseverance and good judgment were manifested in these cases as in others, we should be able to cure many of them without operation.

He could not agree with the author of the paper in regard to the increased danger from the presence of adhesions. The only death that he has had was in a case where there were no adhesions and the operation was performed with ease. In many of the other cases there have been extensive adhesions.

DR. THOMAS ADDIS EMMET, of New York, remarked that what he had to say was rather in the form of a protest. He is not an advocate of the operation and he thinks that more harm than good has been done by its performance. There are cases where the operation must be done. Where there is salpingitis with the tubes filled with pus the operation is certainly indicated. That the operation should be done, as it frequently is, for the relief of so many symptoms is, he thinks, a reproach on the profession. He can not advocate the opening

of the abdomen for the purpose of making a diagnosis. If the diagnosis can not be made before hand, he does not think it justifiable to run the risk of opening the abdomen.

For three years he has been looking for cases in which he considered the operation indicated, and he has seen but two such cases. One was a typical case in which there had been several attacks of peritonitis, following gonorrhœa. He found both tubes as large as his wrist and presenting the twisted appearance described by Tait. The history indicated the existence of pus. He urged an operation, but the patient refused. She was seen by Dr. Thomas who also recommended operation. She insisted upon staying in Dr. Emmet's private hospital. For five months there was no improvement. The treatment consisted of hot water injections, keeping the bowels regular, applications of iodine daily, and attention to the general health. After several months, the tubes began to diminish in size, and in the course of a year the accumulation entirely disappeared and she left the hospital apparently a well woman.

The second case was similar; she also refused an operation. She is now no worse, and in some respects better than she was some years ago.

DR. LUSK said that great caution must be exercised in the performance of this operation. He recently saw a lady who had pelvic inflammation following the use of a stem pessary. There is now thickening of the broad ligaments. She visited a gynecologist, who advised the removal of the two ovaries. He could find no evidence of disease of the ovaries or tubes. In many of the operations which he has seen there has been no evidence of disease in the ovaries or tubes removed. He does not condemn the operation. He has operated in four cases in which there was distinct evidence of disease of the tube, with good success.

DR. H. P. C. WILSON thought that many cases have been operated on which should have been left alone; but there are many cases which nothing but the operation will relieve.

DR. E. W. JENKS, of Detroit, was aware of several cases in which the operation has been performed without benefit. Where the ovaries and tubes are diseased, there can be no question as to the propriety of its performance.

In many of these cases of so-called hystero-epilepsy, which are often nothing more than hysteria, he considers the removal of the ovaries and the stopping of the prospect of the patient becoming a mother, a positive wrong. The exploratory operation is not free from danger, as he knows of four deaths under these circumstances, in which no disease of the ovary was found.

DR. T. A. REAMY, of Cincinnati, said that one woman was sent to him with dysmenorrhœa and hysterical symptoms, with the request that he should remove the ovaries. It was a well-marked case. Five month's treatment of the cavity of the uterus with change in her surroundings and general treatment, resulted in entire recovery. He had had several other striking cases.

It is the exception to find the ovary healthy in women after the age of forty. He has been making these observations for ten or twelve years.

DR. EMMET said that this operation is sometimes done for dysmenorrhœa. He thinks that it should never be done for this condition. He considers dysmenorrhœa a neuralgic condition, the result of anæmia. When the dysmenorrhœa is relieved by operation, it is because the general nutrition is improved by the removal of the ovaries.

DR. SUTTON agreed with Dr. Baker that where, in an exploratory operation, the ovaries and tubes are found to be healthy, they should not be disturbed.

DR. M. D. MANN, of Buffalo, said that Dr. Emmet has made the statement that dysmenorrhœa is a neuralgic condition, and is not an indication for the operation. Although it may be neuralgic, he thought that the neuralgic condition may become so firmly established that it cannot be relieved without taking out the seat of the neuralgia. In two such cases he had thought the operation indicated. In one the patient was free from pain only three days in each month. He advised the operation, which was performed by Dr. Clark, of Niagara. The patient completely recovered.

The second case was his own. The woman had suffered for a number of years with excruciating pain. The ovaries were enlarged and tender. The whole abdomen was tender. The ovaries were removed and the patient entirely recovered her health. He cannot admit that there are no cases of ovarian dysmenorrhœa which can be relieved by the operation. He, however, thinks that they are rare.

DR. J. TABER JOHNSON did not recommend the operation except under well-marked indications. He agreed with those who fear that the operation may be performed oftener than necessary. Its use in nervous and neuralgic conditions is not always as beneficial as in some other conditions, myoma of the uterus, for example.

(*To be continued.*)

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, September 3, 1885.

(Concluded from page 331.)

THE PRESIDENT, B. F. BAER, M.D., IN THE CHAIR.

DR. E. E. MONTGOMERY read the following supplement to his paper on

BROMIDE OF ETHYL.

I read a paper on bromide of ethyl as an anæsthetic in labor before the April meeting of this Society. Although I did not attempt a history of the early administration of the drug, subsequent investigation has shown me that I did Dr. L. Turnbull injustice in not mentioning that to him we are indebted for the revival of this agent and its first use in this country. In following the German literature, by which I was led to use this drug in labor, I ascribed its first obstetrical use to Lebert, of Paris. The first case in which he used it was for the application of forceps, and occurred in March, 1881; but a paper, published by Dr. Turnbull (*Medical Bulletin*, June, 1880) shows that he had then used it in a second case of labor, and spoke in high terms of its peculiar advantages. Dr. H. Augustus Wilson had used it in labor prior to August 7, 1850, when he published an article upon this drug (*Medical and Surgical Reporter*, August 7, 1880). It becomes quite evident that the first obstetrical trial of this agent was made in this city, and the priority lies between the gentlemen named. Various mixtures of the ethyl have been ad-

vocated in labor and minor surgical operations. Booth, of Ohio (*Therapeutic Gazette*, 1884–85), recommends alcohol two parts, chloroform and bromide of ethyl, each one part.

Dr. W. H. Byrd, of Quincy, Ill. (*Ther. Gaz.*, March, 1884), has used bromide of ethyl one part, chlorofrom three parts, alcohol four parts, in some ninety-eight cases, without a single unpleasant symptom. It has not everywhere received the same condemnation that is shown by the hesitancy to use it in this city. In spite of the bad name given it by two deaths under its use, and the apparently dangerous symptoms induced by experiments upon the lower animals, its use has been revived by Chisolm (*Maryland Med. Journ.*, 1882–3, ix. 388), and Prince (*St. Louis Med. and Surg. Journ.*, 1883, xiv. 297), who strongly urge its use in minor operations and preliminary to the administration of ether. The last named has reported five hundred cases in which it was used without a single unpleasant symptom.

A leading article in the *Therapeutic Gazette*, June, 1885, advocates a redistillation of a mixture of bromide of ethyl and olive oil as a valuable and safe anæsthetic in labor. These facts are referred to simply to induce the profession to give this anæsthetic a fair trial in ameliorating the terrible suffering of natural labor.

DR. MONTGOMERY exhibited a

UTERINE FIBROID POLYPUS.

Miss R., æt. 38 years, began to menstruate at 17 years. The flow was regular, quite free, lasting a week, and was attended with pain the first three days. Ten years ago she had a hemorrhage, and subsequently several such attacks. Two years later she had a severe hemorrhage, followed by a bloody discharge, continuing several months, since which time she has never been regular. The flow would occur frequently, be very profuse, and attended with pain and loss of flesh. The symptoms were more marked during the last year. At one of the hospital clinics, some years ago, the difficulty was ascribed to anteversion of the womb. Dr. Bourneville examined her three weeks ago, diagnosticated the condition fibroid polypus, and referred the case to me for treatment. She was quite pale, lips bloodless, complained of pelvic pain, and of a constant bloody discharge, which amounted to hemorrhage upon the slightest exertion. The vagina was dilated by a tumor the size of an orange, about whose pedicle could be felt the neck of the uterus. The finger passed into the os and about the tumor without difficulty. Every examination was followed by severe hemorrhage. The pedicle was cut through by means of the wire écraseur, and the tumor removed by means of polypus forceps.

Considerable hemorrhage followed its removal. As this was not controlled by applications of hot water, a tampon saturated with a solution of subsulphate of iron was introduced. This was removed on the second day. On the fourth her temperature was up to 103° F. She had a chill, and pains in various parts of her body. These symptoms vanished under the use of quinine, digitalis, and opium. Five weeks after the operation she appeared much improved; has had no bleeding since; her appetite and strength are greatly increased; the uterus is normal in size; the cervix still dilatable, and will admit the finger with pressure; the cervical membrane was in good condition.

The tumor was the size of an orange; the mucous membrane of the lower surface was ulcerated, so that vessels were ruptured, allowing hemorrhage on any exertion.

The case is of interest from the long continuance of the hemorrhage, and illustrates the importance of early and careful examination of the cavity of the uterus in cases of protracted hemorrhage.

DR. GOODELL seldom uses the wire now for the removal of uterine polypi. He prefers traction with twisting or enucleation by the finger. There is less bleeding, and he is afraid of "cupping" of the fundus uteri and its injury by being included in the wire loop. He had made traction with the obstetric forceps, and enucleated tumors so large as to rupture the perineum even after lateral incisions had been made in the labia. He has partially inverted the womb, enucleated the tumor, and then restored the organ to its proper form. The tumor sometimes occludes the os, and fetid pus from necrosis of the growth is imprisoned above it, giving rise to a suspicion of cancer.

DR. BAER thought Monsel's solution may have caused the high temperature. Vinegar would have been a better hemostatic, and it is also an antiseptic. From the appearance of the specimen a portion of the adventitious growth seems to have been left behind, and it would be interesting to know the history of the stump.

DR. PARISH has removed many fibroids of various sizes, and sometimes with degenerated tissues and fetid odors. The rapid recovery of Dr. Montgomery's patient was remarkable. It is much to be regretted when any portion of the tumor is left, since necrotic change is rapid and decided in such tissue, and there is danger of blood-poisoning. The pedicle, however, generally shrinks and disappears.

DR. GOODELL remarked that this tumor appeared to be sessile, and had been wholly removed. The pedicle proper is usually simply mucous membrane without adventitious tissue, and it makes very little difference if some of it is left behind, as it shrinks away and is absorbed.

DR. ALLEN sometimes regretted that he was compelled to leave a portion of pedicle or tumor in the uterus, but he has never seen any bad consequences follow it. He prefers vinegar to iron as a hemostatic, and considers it as good an antiseptic as carbolic acid.

DR. MONTGOMERY remarked that the wire evidently brought away all the tumor. There was no evidence of any remnant on examination to-day. In one case a portion of tumor or pedicle was unavoidably left, and he removed it some time afterwards by means of a tenaculum. He wounded his finger in doing so, and suffered from septicæmia. The woman had an attack of cellulitis.

NEWS ITEMS.

MORE RESIGNATIONS FROM THE CONGRESS. — Dr. John C. Dalton, of New York, has resigned the Presidency of the Section of Physiology; Dr. R. B. Maury, of Memphis, the Vice-Presidency of the Section of Gynecology; Dr. Thomas F. Rochester, of Buffalo, the Vice-Presidency of the Section of Medicine; Dr. E. Fletcher Ingalls, of Chicago, the Secretaryship of the Section of Laryngology; President Gilman, of Johns

Hopkins University, the Councillorship in the Section of Medical Education, Legislation, and Registration; Dr. Thomas T. Sabine, of New York, the Councillorship in the Section of Anatomy; Dr. Thomas M. Markoe, of New York, the Councillorship in the Section of Surgery; and Dr. E. G. Loring, of New York, the Councillorship in the Section of Ophthalmology.

THE CHESTER COUNTY (PA.) MEDICAL SOCIETY AND THE INTERNATIONAL MEDICAL CONGRESS.—At the stated meeting of the Chester County Medical Society, held September 8th, the following preamble and resolutions were adopted:

Whereas, The members of this Society feel a lively interest in the prosperity of the American Medical Association and in the highest success the Ninth International Medical Congress, and believe that when a mistake has been made, it is better to correct it, than to ignore it through a false pride of consistency; therefore,

Resolved, That it is the judgment of this Society that, while the American Medical Association has a perfect right to enforce its Code of Ethics upon all associations subordinate to it, it has no such right as regards the International Medical Congress, a body with which it has no fixed connection, and which does not undertake to regulate matters of professional ethics. That the attempt to organize the Congress solely from its own membership and that of subordinate associations was most unwise and inhospitable, and calculated to lessen the influence and usefulness of the American Medical Association.

Resolved, That we hereby instruct our delegates to the next annual meeting of the American Medical Association to use all honorable endeavors to secure that the false step taken at New Orleans shall be retracted; and that those who led the Association into the present folly shall not be entrusted with the arrangements for the International Medical Congress.

PUBLIC OPINION ON THE CONGRESS OUTLOOK.—It will thus be observed that the changes made by the Committee in the appointees of the Congress are not of a character to inspire the very highest order of scientific work, nor do we believe that the Congress, as now organized, will attract that attention and interest it would have received under the plan of organization first proposed. The revolutionary work of the American Medical Association, in authorizing the changes made by its Committee, is entitled to every atom of criticism and censure it has received. There was no reason or justice in its action. This action will have but one result, that of lowering the standard of scientific work in this country and of introducing into the ranks of the profession an element of discord and disturbance which cannot be effaced during the next generation. The Association has given its entire influence towards elevating the claims of men who care more for their own advancement than for the general professional good. It has favored an alliance with ideas and principles which have no existence in the scientific creed of our times. The present organization of the Congress, as far as it is known, bears no comparison in point of ability and authority to the first organization. Inasmuch as it has been called into existence out of deference to false issues and demagogical ideas, its results will not only prove highly prejudicial to the success of the Congress, but can have only an unfavorable influence upon the status of the profession in the United States.—*Maryland Medical Journal.*

For the first time in its history the International Medical Congress has fallen into the sole management of a society of the country in which it is to meet. Although Sir James Paget, an ex-President, expressly affirms that this was not expected or desired when an invitation was given, yet it is evident from recent events that the society referred to intends to retain its hold, and force upon the Congress its own men and methods. The work of the Committee which met here in such secrecy on September 3d but too surely confirms this. The details show some indications of adroit wriggling to escape the results of previous blunders, but no manly meeting of the issues, and no recognition of the real demands of the profession. The Committee have utterly eliminated and blotted out Drs. Cole and Shoemaker, trusting, we presume, to gain back Philadelphia by thus making scapegoats of these gentlemen. They have also filled the vacancies in the Presidencies of the Sections. Their list of names suggests both freshness and decay, but does not fairly represent American medicine. And the profession will very quickly ask who many of these new men are who thus take the seats which have heretofore been held only by recognized leaders. Is our country to be made ridiculous by their upheaval, and the Congress turned into a menagerie of unknown doctors and ethical sticklers?

However, though the appointments are weak enough, they need not kill the Congress. But a much more serious thing remains: no attempt was made to remove the Code issue from the Congress. It is still incumbent on an American physician to subscribe to the American Medical Association's Code of Ethics in order to hold any official position in the Ninth International Congress—if it meets in this country. The stupidity, as well as absolute wrongfulness, of failing to meet this point is certainly beyond parallel. The good Lord only knows, perhaps, what a number of nice, venerable, determined old gentlemen we have here trying to manage our little medical world; but many of us are getting some inkling of their immeasurable and fathomless fatuity. It appears, at any rate, that they are bound to destroy the Congress, for they persist in forcing upon it restrictions which cut off from the Congress and impugn the respectibility of a large number of the most honored men in our profession. In thus doing they violate justice and right, break the pledges at Copenhagen, and affront their fellow-physicians here. Of course a bitter controversy is inevitable; and we are sorrowfully forced to the conclusion that there is at present no hope for the Congress whatever. The profession here and in other centres is almost a unit against the policy of the Association and its Committee, and it will continue to protest against the organization of a meeting which will be so thoroughly misrepresentative of American medicine.—*The Medical Record.*

THE DISSENSIONS IN AMERICA.—Under this heading the *Medical Times*, of London, publishes a letter received from Dr. N. S. Davis, of Chicago, from which we make the following extract:

"As there is only one body in England representative

of the whole English or British profession, the British Medical Association, so there is only one in the United States which could, under any possible circumstances, represent the profession in the United States; and that is the American Medical Association. From Maine to California, and from the British possessions on the North to Mexico on the South, every State and Territory is represented in that body. Now, you say in your letter that you are 'sure that it was present to the mind of every one there (Copenhagen) that the invitation (to have the Congress meet in Washington in 1887) was one from the profession of America and not from any section of it, or any particular medical society in it.' To which it may be replied: The invitation was extended by Dr. Billings, and Dr. Billings had been appointed to extend the invitation. Who appointed him? Whence came his authority for assuring the Congress that it would receive a warm welcome in this country in 1887? He was one of a committee *appointed at* a meeting of the American Medical Association *by* the President of the Association, who acted *for* the Association, and by the authority of the Association. . . . . The American Medical Association has invited the Congress to meet in Washington in 1887, and the invitation has been accepted. The American Medical Association is fully competent to make all necessary arrangements for that meeting, on as liberal a basis as has characterized any of the preceding Congresses. We only ask that our brethren in Europe will reserve their comments until the programme is completed and before them."

The Editor of the *Medical Times* appends to this letter the following note:

"We have not space in the present number to deal fully with Dr. Davis's letter or with the other documents stating the case of the American Medical Association which have reached us. We may, however, point out here that the British Medical Association has never claimed to represent the whole English profession, though we believe its claim to do so, if it should ever be so ill-advised as to make it, would be much more valid than the claim put forward on behalf of the American Medical Association. Whatever Dr. Davis may say, the fact remains, as the officers of the London Congress have stated, that on no previous occasion has any medical body attempted to capture and run the International Congress as the American Association is now attempting to do."

A NAVAL MEDICAL EXAMINING BOARD is now in session at the Naval Hospital, Philadelphia, for the examination of candidates for admission into the Medical Corps of the Navy, in which there are 13 vacancies. Candidates must be between 21 and 26 years of age, and must apply to the Secretary of the Navy for permission to appear before the Board.

DR. WILLIAM GOODELL, of Philadelphia, was recently elected an honorary member of the British Gynecological Society.

RESIGNATION OF SURGEON-GENERAL HAMILTON.—Dr. J. B. Hamilton has tendered his resignation as Surgeon-General of the Marine-Hospital Service, to take effect November 1, but he remains in the service with the rank of surgeon. It is expected that he will be stationed at Chicago. Dr. Hamilton was promoted to the office of Surgeon-General in 1879.

SMALLPOX NOT ABATING IN CANADA.—There were twenty-seven deaths from smallpox in Montreal on the 21st.

A statement submitted at the civic Board of Health on the 22d inst., showed that of 184 deaths from smallpox for six days ending September 18, 169 were French Catholics, 9 other Catholics, and 6 Protestants. There were 50 deaths in the adjoining municipality in the last four days. The Gray nuns are taking charge of 186 patients in the city and 28 in Ste. Cunnegonde.

At the meeting of the Citizens' Committee, held on 22d inst., when the subject of compulsory vaccination came up, Alderman Gray, Chairman of the Health Committee, said that if they attempted to carry out compulsory vaccination in Quebec and the suburbs, the French people there would repel them by force.

SMALLPOX QUARANTINE.—The Governor of Massachusetts has requested the Secretary of the Treasury to appoint medical inspectors on the Canadian border, east of Lake Ontario, to inspect passengers arriving by rail through northern Vermont.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, FOR THE FOUR WEEKS ENDING SEPTEMBER 19, 1885.

VANSANT, JOHN, *Surgeon.*—To proceed to New Orleans, La., September 16, 1885.

HUTTON, W. H. H., *Surgeon.*—When relieved, to proceed to Mobile, Ala., September 16, 1885.

LONG, W. H., *Surgeon.*—Granted leave of absence for ten days, September 1, 1885. When relieved, to proceed to Detroit, Mich., September 19, 1885.

FESSENDEN, C. S. D., *Surgeon.*—To proceed to Norfolk, Va., September 16, 1885.

SAWTELLE, H. W., *Surgeon.*—When relieved, to proceed to San Francisco, Cal., September 18, 1885.

GODFREY, John, *Surgeon.*—When relieved, to proceed to Louisville, Ky., September 16, 1885.

GOLDSBOROUGH, C. B., *Passed Assistant Surgeon.*—When relieved, to proceed to St. Louis, Mo.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY DURING THE WEEK ENDING SEPTEMBER 19, 1885.

MURRAY, J. M., *Passed Assistant Surgeon.*—Resignation accepted to take effect January 1, 1886.

ROSS, J. W., *Surgeon.*—To special duty at New York.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM SEPTEMBER 15 TO SEPTEMBER 21, 1885.

CAMPBELL, JOHN, *Colonel and Surgeon.*—Retired from active service, September 16, 1885.—*S. O. 212, A. G. O.*, September 16, 1885.

AINSWORTH, F. C., *Captain and Assistant Surgeon.*—From Department of Texas to New York City, for duty as Recorder of the Army Medical Examining Board.—*S. O. 214, A. G. O.*, September 18, 1885.

SHANNON, WM. C., *Captain and Assistant Surgeon.*—Granted leave of absence for four months, to take effect about October 1.—*S. O. 215, A. G. O.*, September 19, 1885.